DOCUMENT RESUME

ED 218 511 CE 033 169

AUTHOR Bradley, Judy; Hegarty, Seamus
TITLE Students with Special Needs in FE. A Review of Current and Completed Research Relating to Young People in the 14-19 Age Range with Special Educational Needs. Project Report 12.
INSTITUTION Further Education Curriculum Review and Development, London (England).
SPONS AGENCY Further Education Curriculum and Development Unit, London (England).
REPORT NO ISBN-0-85522-095-3
PUB DATE Oct 81
NOTE 48p.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Access to Education; *Adolescents; *Adult Education; Career Counseling; Career Education; Continuing Education; *Disabilities; Dropouts; *Educational Needs; Educational Research; Education Work Relationship; Emotional Problems; Employment Level; Employment Patterns; Employment Services; Individual Needs; Literature Reviews; Needs Assessment; Outcomes of Education; Research Design; Research Methodology; *Research Needs; Social Problems; Student Needs; Young Adults
IDENTIFIERS *England; *Special Needs Students

ABSTRACT

A review of current and completed research relating to youth aged 14-17 with special educational needs (with special emphasis on research relevant to the British educational context) reveals that, to date, most research has examined the needs of young people with special conditions rather than focusing on a broader cross-section of all young people with special needs. Methodologically, many of the studies have been limited by being small-scale, lacking in theoretical awareness, or being purely descriptive. Particularly needed are more prospective longitudinal studies to give a more complete picture than do currently prevalent retrospective studies. In addition, little information exists in the area of the continuity of support that a disabled individual might be expected to receive during and after childhood. Among those areas in which further research is needed concerning educational needs of special needs students are the following: target group, organization of provision, special schools, further education sector, curriculum, attainment, careers education and guidance, work preparation, employment experience, unemployment, social and emotional development, assessment, training, support services, and information dissemination. (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED218511

Further Education Curriculum Review and Development Unit

PROJECT REPORT

STUDENTS WITH SPECIAL NEEDS IN FE

A review of current and completed research relating to young people in the 14–19 age range with special educational needs

CE033169

P.R.12

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Mansell

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

October 1981

The Further Education Curriculum Review and Development Unit (FEU) is an advisory, intelligence and development body for further education. It was established in 1977 by the Secretary of State for Education and Science to make possible a more co-ordinated and cohesive approach to curriculum development in FE by

(1) reviewing the range of existing curricula and identifying overlap, duplication and deficiencies

(2) determining priorities for action to improve the total provision and suggesting ways in which improvement can be effected

(3) carrying out specific studies, helping with curricular experiments, and contribution to the evaluation of objectives, and

(4) disseminating information about the process of curriculum development in FE.

The publications in this series of Project Reports are intended to inform teachers and others and to stimulate professional discussion about matters of concern to the FE service. The views expressed are those of the authors and are not necessarily those of the Unit's Board of Management.

A limited number of extra copies of this report are available from

Publications Despatch Centre,
Department of Education & Science,
Honeypot Lane, Canons Park,
Stanmore, Middlesex HA7 1AZ.
Tel: 01–952–2366 Ext 503.

Jack Mansell
Director

October 1981

ISBN 0 85522 095 3

Further Education Curriculum Review and Development Unit

PROJECT REPORT

STUDENTS WITH SPECIAL NEEDS IN FE

A review of current and completed research relating to young people in the 14-19 age range with special educational needs

Judy Bradley
and
Seamus Hegarty

Report of a project commissioned by FEU from
The National Foundation for Educational Research

Further Education Curriculum Review and Development Unit

Board of Management

Chairman	**Rev Canon George Tolley** Principal, Sheffield City Polytechnic
Members	**R C Aldridge** Association of Principals of Colleges— Association of Colleges of Further and Higher Education
	J C N Baillie National Association of Teachers in Further and Higher Education
	T R Clendon Manpower Services Commission, Training Services Division
	J H Davies Welsh Joint Education Committee
	J Deboo Confederation of British Industry
	R J Hartles Association of Metropolitan Authorities
	R Jackson Trades Union Congress
	E Norris HMI Department of Education and Science
	C R Walker Department of Education and Science
Observers	**Dr F D Duffin** Department of Education, Northern Ireland
	J F Mann Schools Council
	J M Laugharne HMI Welsh Office Education Department
Secretary	**Jack Mansell** Director, Further Education Curriculum Review and Development Unit

Project Report No 12

Contents

			Page
Chapter 1 Introduction			5
Chapter 2 The Target Group	Section 1	Categorisation	6
	Section 2	Labelling	
Chapter 3 Needs and Provision	Section 1	Educational	8
		1.1 School based	
		1.2 Further education	
		1.3 Curriculum	
		1.4 Attainment	
	Section 2	Vocational	14
		2.1 Careers education	
		2.2 Careers guidance	
		2.3 Work preparation and Work experience	
		2.4 Employment experiences	
		2.5 Living without work	
	Section 3	Social and emotional	20
		3.1 Adjustment to disability	
		3.2 Social interaction	
		3.3 Emotional and behavioural problems	
Chapter 4 Contextual Variables	Section 1	Assessment	23
	Section 2	Staff training	
	Section 3	Support services	
	Section 4	Housing and access	
	Section 5	Disseminating information	
	Section 6	Co-ordination and co-operation	
Chapter 5 Research Issues and Recommendations			29

Note

We would draw attention to the study being carried out by Klaus Wedell and Jenny Roberts at the London University Institute of Education under SSRC sponsorship. This is a research review on children with special educational needs with a brief to provide an overview of research, analyse trends in current research, and make recommendations for future research. Though there is a slight overlap, this complements our review in a most useful way.

This study runs from October 1980 to June 1981 and thus was in the field before us. We would like to acknowledge the very generous assistance we received from the team. They gave us full access to the information they had already collected, and without this our efforts would have been greatly limited.

CHAPTER 1

Introduction

This project arose from a commission by the Further Education Curriculum Review and Development Unit. The terms of reference were:

i. To carry out a critical review of current and completed research relating to young people in the 14-19 age range with special educational needs.
ii. To identify areas in which further research and/or development work might be required and thus provide a basis for planning a co-ordinated approach to further work in this area.

The Warnock Report identifies the 16-19 age group as a priority area, maintaining that those in that group with special educational needs require more support than is currently available in order to make a successful transition from compulsory schooling to adult and working life. The major research funding bodies agreed that particular attention should be paid to this area and that a co-ordinated approach would be beneficial. It was felt that the age range should be broadened from 16-19 to 14-19. This is to take cognisance of the fact that preparation for adult life begins before the end of compulsory schooling, and also because initiatives taken in the final years of school should be followed up into further education and employment or unemployment. The scope for research on this age group is considerable and has implications for a variety of funding programmes. It is hoped that this review of research will provide a basis for a co-ordinated multi-disciplinary approach to the area.

Much of the research has been undertaken in the United States. We have not reported this extensively since many of the findings from other countries are culture-specific and of limited relevance to Britain. Where a more generally applicable or particularly relevant piece of research has emerged, American research has been included. In point of fact, very little work has been carried out in this country on the 14-19 age group – and little enough on the 16-19 age group. Related studies on adults and children are cited when they illuminate particular issues of relevance to adolescents.

The review begins with a consideration of the target group. There are no incidence studies to draw on and in any case there are considerable problems of definition. Categorisation and labelling are two of the issues that have to be considered in clarifying the nature of the group under discussion. The main section of the review has to do with the special needs of this group – educational, vocational, social and emotional – and the provision available to meet them. This covers (a) different forms of educational provision, and teaching and learning variables; (b) careers education and guidance, work preparation, and employment experiences; (c) adjustment to handicap, social interaction, and emotional and behavioural variables. A further section discusses contextual variables: assessment of young people with special needs; staff training; support services; housing and access; the dissemination of information; and co-ordination between the different agencies and forms of provision. A final summary section notes trends and suggests where further research might be carried out.

CHAPTER 2

The Target Group

1 Categorisation

2 Labelling

This review is concerned with young people aged 14-19 with special educational needs. This group is not well defined, and precise estimates of incidence are not available. Incidence studies such as the Isle of Wight Survey (Rutter, 1970) and the National Child Development Study shed some light on this; the broad conclusion from them, noted in the Warnock Report, is that the planning of services should be based on the assumption that about 1 in 6 children at any time and up to 1 in 5 children at some time during their school career will require some form of special educational provision. These are concerned with younger pupils for the most part and are of most use in considering the period of compulsory schooling. After that time the problems are broader and in some ways more complex. Incidence studies at this age range will still run into the problems of categorisation discussed below and inevitably yield crude data. Quantitative information is essential in planning services however, especially if they are expensive and/or cater for relatively small groups. There is a need to develop more systematic ways of recording the requisite information and to evaluate these for relevance and practicality.

1 Categorisation

The question of categorisation of handicapped people has been of enormous importance for all age groups, and has undoubtedly had significant consequences for the nature of the research that has been conducted. A recognisable similarity exists in the categories of disability in current use in most Western countries. There is now a widespread recognition of the need for change, but no discernible agreement has yet been reached on the exact direction it should take. Many individuals suffer from multiple disability and this can present intractable categorisation problems, especially since the major disability in medical terms may not be the most important from the point of view of education or other services. Thus confusion can arise between an individual's disability and the nature of his or her special educational needs. Indeed, it has often been observed that concern for a medical condition alone may force young people into groups which are, in educational terms, inappropriate (Davie, 1975; Jones, 1971; Rutter et al, 1970; Tizard, 1966).

In rejecting the medical model of handicap, Wood and Badley (1978) have noted that intervention at the level of one element has the potential to modify succeeding elements in the sequence from initial impairment to handicap. This obviously has important consequences for young people as they face adult life. They observe, moreover, that a given handicap can result from a variety of impairments. Hence, it may be concluded that to restrict consideration to the underlying causes – as in the medical model – is dangerously reductionist.

The research literature demonstrates a notable difference in orientation between studies carried out in the past and those of more recent origin. In particular, Wood and Badley (op. cit.) have pointed out that in a great deal of recent work a developing conflict can be detected between two approaches; the empirical and the rational. It has in fact been suggested that 'empiricism devoid of theoretical pretensions' has been holding back the practice of community medicine (Powles, 1973). Recognising that this may be especially true in the case of disability and handicap – neither of which is an exclusively medical phenomenon – Pflanz (1976) argued that instead of following medical definitions and classifications, there was a need to understand the diagnostic label being attached to disablement and to challenge it. It is now widely recognised that an individual may be handicapped in one situation but not in another, in one role but not in another. Thus the distinction may be made between a 'disabled' person as one who has sustained the loss or reduction of a functional ability (Harris and Buckle, 1971) and a 'handicapped' person as one who, consequent upon a disability, is disadvantaged with respect to his or her environment.

Sarason and Doris (1979) offer a cogent critique of prevailing static notions of mental retardation. It is not a condition like cerebral palsy or rheumatism but a status that is given. This is usually regulated by means of an assessment procedure. Individuals fail at tasks and are categorised in terms of their specific failure. These tasks entail a transaction with other people – which may be critical to the individual's response – but prevailing assessment procedures and the classifications based on them rarely take account of the social context of the failure. This view is supported by Sameroff's (1975) analysis of studies linking brain damage with mental retardation. Neither biological factors alone nor poor environmental conditions explain children's poor development, and an argument is made for a transactional model in which the child's interaction with those around him is central.

Assignment schedules for the ascertainment of individuals in prevalence surveys and for the planning of service provision must also be considered in relation to their social contexts. Here differences in purpose have led to different operational definitions so that direct comparisons for research purposes are rare-

ly possible: Garrard and Bennett (1971) on health service planning, Sainsbury (1973) on social administration, and Harris (1971) on social policy may serve as examples. On the basis of these it is not possible to establish generalisations to facilitate the development of theoretical constructs. In response to this problem Wood (1975) proposed a means of assessing handicap based on five survival roles derived in part from the lowest planes of Maslow's (1954) hierarchy of needs: physical independence, mobility, occupation, social integration,and economic self-sufficiency. With an additional dimension, orientation handicap, these now form the basis of an international assignment system (World Health Organisation, 1980). Research demonstrating the validity of this system in a variety of social contexts would make a valuable contribution to our understanding of special needs and to the organisation of services.

The greater recognition of the importance of the social environment limits the applicability to Britain of conclusions from research carried out in other countries. There is, then, a need for greater research input on a variety of issues with specific reference to the needs of young people in British society.

2 Labelling

It has frequently been observed that the difficulty of obtaining information on the handicapped population may be attributed in large part to the fact that many prefer, where possible, to avoid the stigma of registration (Department of Employment, 1972; Tarjan and Eisenberg, 1972; Kushlik and Blunden, 1972; Tizard, 1974). Moreover, leaving school with a handicap label can place young people at a severe employment and social disadvantage: teachers state that it is this label which causes rejection by employers (Martin, 1970) as well as by their non-disabled peers (Jones, 1971). The young person with special needs faces the risk that his or her initial impairment will be allowed to impede the normal process of development. Thus the role of those involved in providing for these young people should be to enable them to overcome potential handicaps by, on the one hand, alerting them to the difficulties they are likely to encounter in the wider community and, on the other, attempting to create in society at large a better understanding of what the labels they are using actually mean.

Grouping people into categories and attaching labels to them are deep-rooted human activities. They provide a means of ordering the plethora of stimuli and information impinging on the individual. They cannot be dispensed with since this is how we erect conceptual structures and make sense of the world. The emphasis has perhaps been in the negative aspects of labelling: labels are socio-cultural artefacts that reflect at best a partial understanding of phenomena, and when they are reified into absolutes the misunderstanding and negative effects can be considerable. It has been suggested however that labels can have positive consequences too, especially when they heighten awareness of a problem and lead to new policies to remedy neglect (Gallagher, 1972; Kolstoe, 1972). It is not, then, simply a question of eradicating labels, but of enhancing understanding and changing social attitudes and social responses towards the people to whom they are applied.

CHAPTER 3

Needs and Provision

1 Educational

2 Vocational

3 Social and emotional

---

1 Educational

The education of young people with special needs falls within the two contexts of the educational provision made for their age peers and that of special education in general. So it can take place in schools or in the FE sector, and can embrace a wide range of curricular provision. As far as special education goes, there is a wide range of practice – that is currently in a dynamic and expanding state – to draw on. The Warnock Report offers a useful crystallisation in terms of access to the curriculum, its content and the context in which it is provided. It suggests that special educational need is likely to take the form of one or more of:

i. the provision of special means of access to the curriculum through special equipment, facilities or resources, modification of the physical environment or specialist teaching techniques,
ii. the provision of a special or modified curriculum,
iii. particular attention to the social structure and emotional climate in which education takes place.

As pupils get older, the specifics change, of course, and new priorities emerge, but the overall framework is still useful. Formal education does not cease to be relevant; indeed, as noted below in the Curriculum section, it can take on a new importance. Mittler (1979) has observed that 'to deprive them of educational opportunities at the very time when they seem able to benefit from them is the antithesis of both commonsense and sound social policy' (page 106).

In this section we look at the organisation of provision within both the school and further education sectors, and then consider issues relating specifically to the curriculum. We would note in passing that adult education and access to it by those with special needs provide a further context. The Russell Report (1973) on Adult Education urged the systematic expansion of adult education to include those such as the handicapped at present untouched by it. In particular, it recommended (i) special provision for identified groups of disadvantaged adults, (ii) training for those making the provision, (iii) education of the public about handicapped groups and (iv) training and orientation of those involved in living with the handicapped. These recommendations have not been implemented on any scale. While all of this applies to adults generally, there are specific considerations for young people as well. Thus Jowett (1981) reports that young people who attended a special training college for the disabled did not readily avail themselves of evening courses and other continuing education opportunities after they had left the training college. It is clear that structuring adult education so that it is relevant to those with special needs and is accessible to them poses major problems. With young adults there is the further consideration that they have been accustomed over many years to having services laid on for them, sometimes in residential situations, and when these structures are removed they may lack the motivation and experience to seek out opportunities for continuing education.

1.1 School-based. There is a great variety of educational provision available for young people with special needs. This ranges from residential special schools through various special arrangements in ordinary schools to placement in an ordinary class. This variety is commonly described in terms of points along a continuum from total separation from ordinary schooling to full integration within it. Following Deno's (1970) classification various models of provision have been proposed. Models relevant to British practice include Hegarty and Pocklington (1981) and Cope and Anderson (1977) referring specifically to physically handicapped pupils.

Some of this variety of provision is due to historical factors rather than planned efforts to meet pupils' special needs. It does also however reflect the fact that integration has to do with the response of the ordinary school to the expansion of its role. Different schools naturally will respond in quite different ways. So the education of children and young people with special needs requires considerable flexibility of provision and has implications for ordinary schools just as much as for special schools. The few British studies of integration have tended to concentrate on the primary level. A major study recently completed at NFER (Hegarty and Pocklington, 1981) included a number of integration programmes at secondary level, covering pupils with learning difficulties, physical handicaps and hearing impairment. These programmes are documented in detail and relevant issues are discussed – staffing, costs, curriculum, transition to adult life, the social context and parents.

Various issues stand out as requiring additional research attention. Apart from the curriculum and teacher training which are discussed later, these include: the efficacy of and constraints associated with different forms of integration in relation to the needs of older pupils; the new roles that special schools can adopt; the forging of relationships between special schools and the FE sector, employers, the local community and ordinary schools; and the problems of adolescence.

In order to encourage school-based provision for the post-16 age group Warnock (1978) urged local education authorities to give adequate financial support in the form of maintenance allowances to the families of students with special needs who remain at school beyond the statutory leaving age. In cases where students from special schools are able to move to the sixth form college, they would have the residential back-up of the special school and the support of specialist staff. To date there has been little examination of the feasibility and efficacy of these various kinds of school-based provision. It has, however, been shown that many disabled young people fail to achieve their potential after leaving school, and that services for them are in urgent need of improvement both before the leaving stage as a preparation for adult life and actually on the point of leaving when many may find themselves suddenly deprived of the necessary support (National Youth Employment Council, 1974; National Development Group for the Mentally Handicapped, 1977; Manpower Services Commission, 1977; 1978).

1.2 Further Education. The further education sector, accustomed as it is to providing for a very wide range of educational demand, is ostensibly the most viable alternative to staying on at school. Indeed, it has been observed that further education is, or should be, the growth area in provision for young people with special needs, many of whom are unlikely to have reached their learning ceiling by the age of sixteen (Rowan, 1980).

Until the mid 1970s there was little or no provision in the normal further education colleges for disabled young people. With few exceptions students accepted for courses had to be able bodied and have reached a minimum educational standard. Work experience courses existed but they were largely experimental and offered little evidence of an overall policy toward the education of the less able (Browne, 1981). The first national study of disabled school leavers (Tuckey et al, 1973) was concerned with a sample of young people who had attended special schools, but the results do provide an example of the wider picture. Information was collected by interview on the range, availability, and suitability of the facilities for further education, training and employment for this group. The distinction made between further education and training did not in the event prove sustainable. Eighty-three per cent of the sample were considered by their head teachers to be suitable for further education or training. It should be noted that the severely educationally subnormal were not included as they were then outside the education system. Taking the sample as a whole, 1 per cent went into higher education, 10 per cent to colleges of further education, 9 per cent to special residential courses, 7 per cent to employment rehabilitation centres, 5 per cent to training centres, and a further 5 per cent to other miscellaneous provisions. Fifty-one per cent of those considered suitable found themselves with no provision at all. The researchers concluded that provision for post-school education and training was inadequate; they attributed the low further education take-up in part to inadequate co-ordination between the schools, the local education authorities and the colleges. It was felt that more opportunities should be provided not only in residential colleges but also at the local level.

Another study based on interviews (Brindley, 1977) and concerned particularly with the physically handicapped, found that students, their parents and teachers all had expectations of local further education which could not be satisfied. Provision for the slow learning and socially immature was especially lacking. Teachers were concerned that colleges did not give high priority to non-vocational courses, that there was a shortage of specialist staff to deal with handicapped students, and that curriculum development for them was insufficient. Physical access and mobility problems, inadequate transport arrangements and lack of personal care provision were cited as reasons why parents and teachers saw residential colleges as a more realistic alternative.

Studies of provision in the universities and polytechnics (Gunn, 1976; 1977; National Innovations Centre, 1974) found a similar situation in higher education for the physically handicapped as that existing in the further education sector. With notable exceptions, such as the Open University, it was concluded that higher education institutions could not generally be said to be serving academically able students with physical handicaps.

Recent surveys have indicated that attitudes towards and provision for students with special educational needs are changing, though it is generally concluded that provision is still far too sporadic (Bennet, 1978; NATFHE, 1978; National Council for Special Education, 1975; National Union of Students and Action Research for the Crippled Child, 1976). As Panckhurst and McAllister (1980) have observed: 'Opportunity for further or higher education may depend more on accident of location than on any other factor: a student may be fortunate enough to live where there is good provision or where the local authority is prepared to sponsor attendance at an institution in some other part of the country' (p. 88). Indeed, Panckhurst (1980) concluded from his investigation of innovative provision within the further education sector that the curriculum was only variably accessible to students with special needs, since the provision of courses to meet varying special requirements was patchy. He therefore suggested that co-ordination at local authority level should be regarded as a first priority.

In fact Warnock (1978) recommended the co-ordinated development of the further education sector on a regional basis, with the policies of individual authorities and colleges being well publicised. It was believed that the great diversity of need necessitated a concomitant variety of courses designed to meet that need, and that such variety might not be possible within small colleges or authorities. There is, however, some evidence to suggest that systematic regional co-ordination is still far from being realised; 'There appears to be a variety of provision emerging which has the approval of those who are both informed and involved but which has yet to develop into the coherent pattern referred to by Warnock' (Panckhurst, 1980, p. 39). The organisation of regional provision is not, of course, without its problems,

not least of which is the position of the specialist national colleges. Warnock clearly saw them as fitting in time into the new regional pattern (para. 10.44). However, these colleges are not uniformly distributed throughout the country and, as Panckhurst and MacAllister (1980) have argued, their survival might be jeopardised if their catchment areas were to be reduced to regions. They argue that colleges should instead be encouraged to take on a more innovative role vis-à-vis staff and curriculum development, as well as continuing their present work: 'The experience and expertise which national colleges have built up should not be dissipated at a time when the further and higher education sectors are being encouraged to open their doors to young people with special needs' (p. 89). Research on how this expertise may best be drawn upon and other questions relating to the logistics of the regional model is clearly necessary.

Current FE provision for students with special needs may take the form of link and bridging courses, adjusted normal courses or special courses. Link courses are essentially run as local provisions, with almost all colleges having a potential contribution. It has been suggested that bridging courses, on the other hand, would be more appropriately organised on an area basis either among colleges within a local authority or even crossing local authority boundaries (Panckhurst, 1980). In Warnock's (1978) discussion of link courses it was stressed that they should not be focused too narrowly on vocational subjects, but should be regarded as an introduction to further education and a way of widening horizons as an inherent part of a school leavers' programme. One writer (Hutchinson, 1979) sees them as helping in an on-going process of assessment. Bridging courses are intended to help the school leaver move into the world of work or on to further courses of study, and are often combined with continued education and vocational skills counselling with a strong element of careers education (Garnett College, 1978). Where the emphasis is on enabling students to try out a variety of vocational experiences, the courses are run on an interdisciplinary basis. While this in theory presents opportunities which FE colleges are uniquely qualified to offer, research has shown that it can present problems in practice.

It was suggested by lecturers participating in an investigation of staff development in further education (Bradley et al, 1981) that courses arranged on an interdepartmental basis were ideal for meeting the special needs of disabled students, since they allowed them to try out a range of work from the secure base of a special unit. However, it was pointed out that in practice difficulties often arose in co-ordinating course elements when they were taught in different departments each of which tended to be run on an autonomous basis. These courses therefore share many of the problems associated with other interdisciplinary courses, which are generally at odds with the way colleges have traditionally been organised.

In the case of both link and bridging courses further research is required to assess how well the teaching provision and methods are adapted to cater for students with special needs and for what is in fact a very wide range of ability. Liaison between schools and colleges, college departments, and the careers service should also be subject to systematic investigation, since it has been suggested that much of this may currently be carried out on a very ad hoc basis (Garnett College, 1978).

For those with physical and sensory disabilities all further education courses are potentially open, though much depends on the ability and willingness of individual colleges to provide the additional support necessary for these students to be able to attend. The physically handicapped may require special arrangements for access in both physical and curricular terms, together with additional aids, for example to assist effective communication, and perhaps paramedical support. Those with sensory disabilities may need appropriate materials or some modifications to the learning environment, and the presence of teaching staff who are sensitive to their special needs.

Within the context of providing modified versions of normal courses, the work preparation and work experience courses offered under the TOPS and YOPS schemes have proved particularly valuable, though it has been found that recruitment to these courses is still not as high as might have been expected (Rowan, 1980). A study of Youth Opportunities Schemes recently undertaken in the West Midlands (WMRCU, 1980) found examples where literacy and numeracy, although clearly required, were not allowed as part of a scheme since it was believed that their inclusion might raise the education content too high for funding by MSC. YOP trainees in these circumstances were sometimes advised to attend adult literacy evening classes, but this generally meant 'decontextualised' literacy unrelated to their daytime activities on the YOP scheme. The researcher suggested that: 'It should not be possible for illiterate YOP trainees to complete a YOP scheme having had no help with their special need but there was some considerable evidence that this occurred' (op. cit. 1980, p. 49). Nevertheless, the MSC requirement of trainee centred learning means that there is great potential within the YOP schemes for assisting students with special educational needs.

Warnock (1978) recommended the creation of at least one special unit in a college in each region (para. 10.40). Some colleges already have these to fulfil the two functions proposed: providing special courses and supporting students with special needs who are following normal courses. There is, however, very little information available on the organisation and running of these units and on the nature of the courses and service they provide.

A significant, and developing, contribution made by further education colleges is that of out-reach provision, whereby classes are held outside the colleges – for instance at centres for the disabled or in their own homes. The development of this provision would appear to have enormous potential for both school leavers and adults, not least since it offers a relatively inexpensive means of ensuring the continued education of those for whom tradi-

tional vocationally orientated courses may be not only inaccessible, but also irrelevant.

There are numerous descriptions in the literature of particular provisions written by individuals involved in their organisation and running. Examples of British descriptive papers of this kind include Browne (1977; 1981), Early (1975), Hill (1976), Morley and Appell (1974), Murray (1976), Nicholls (1977) and Taylor (1974). There is, however, little in the way of independent research and evaluation of such provision. Panckhurst (1980) itemised just some of these – The City Lit Centre for the Deaf and two provisions for the hearing impaired in Nottingham and Sheffield respectively; The Ormonde Centre for the physically handicapped; Fourways Adult Assessment Centre; and the Bridgend Industrial Unit. He concluded that such provisions require careful monitoring and assessment as potentially important models for the developing pattern of provision for disabled students. His own study, which was carried out on a joint basis with Hereward College for the Physically Handicapped (Panckhurst and MacAllister, 1980), has provided valuable information on the problems and potentialities of the work of one of the major national colleges. Research of this kind provides just one way of learning from the techniques and approaches of those with wide experience in working with disabled young people.

There is no doubt that the range and type of provision within the further education sector is extremely varied. It has, however, tended to develop on an ad hoc basis, individual college programmes often owing their existence to the personal commitment of key members of staff (Panckhurst, 1980). The value of a more systematic and planned approach is evident in the fact that college admissions policies indicate that students are not accepted only if it appears that they will not benefit from the course. Thus, as Tomlinson (1981) has noted, if applicants are rejected on the grounds of unsuitability, it is time to re-examine the aims and objectives of courses as they relate to those with special educational needs. It must be asked what needs courses are actually meeting and designed to meet, how these needs have been identified, and how far they are reflecting the aspirations and ambitions of the students following them.

1.3 Curriculum. The curriculum for many special pupils is the same as for their peers, with appropriate steps taken to circumvent sensory impairment, difficulty of recording and so on. For others it would be unrealistic to have normal expectations; time has to be spent teaching them skills and knowledge which other pupils acquire naturally and the net level of achievement will be lower. Unfortunately this can result in a near-exclusive concentration on the basic skills of literacy and numeracy to the exclusion of a broader concern for personal development and, in the case of older pupils, preparation for adult life. There is a further dilemma here: on the one hand, Gunzburg (1974) reports an increase in intellectual efficiency throughout adolescence, but on the other hand the experience of protracted failure is not conducive to belated success. A contrary problem is found in special schools which under-estimate their pupils' intellectual potential and which neglect cognitive development in favour of social adjustment (Wilson, 1981). The lack of explicit attention to curriculum planning in special schools is the subject of frequent comment. Brennan (1979) points out that this applies equally if not more so to the education of slow learners in the ordinary school. Nesbitt's (1976) report on 29 special schools in the North West concluded that there was a general lack of discussion of aims and objectives connected with the curriculum, with teachers tending to see curriculum simply in terms of 'timetable'. The final year concentrated on academic-type work rather than work preparation, since the teachers largely saw their pupils as unemployable. Despite this, there was no real curricular provision for teaching the constructive use of leisure time.

Pocklington and Hegarty (1981) in a study carried out in conjunction with the field officers of the Schools Council describe a number of schools which have been engaged in a process of systematic curriculum review. A major study currently under way at NFER (due to report early in 1982) is looking at provision for slow learners in the secondary school. This is a review of policy and organisation, based on a 20 per cent sample of secondary schools in England and Wales and a number of detailed case studies. It is intended that the project will (a) describe the range of current policies and procedures being adopted for the identification and education of the slow learning secondary school pupil and (b) examine the varying roles of those teachers who specialise in teaching slow learners and the knowledge and skills required to execute such roles effectively.

A general problem here is the lack of both curriculum materials and intervention strategies geared to the adolescent level. Reading materials for nine-year-olds will not suit 15-year-olds even if they are at the same level of reading development. The Basic Skills Unit financed by the Manpower Services Commission is producing materials which could make an important contribution here, especially in the context of YOP schemes. These locate literacy and numeracy in the context of social and life skills. The guiding principle is that the tone of the material should be non-academic since many of the young people for whom they have been designed have already failed within the traditional academic system. More work designing materials appropriate to the 14-19 age group would seem to be a priority for research and development, since the lack of suitable materials is now widely recognised.

As well as appropriate materials, it is also necessary to have intervention strategies that are geared to the age and general development of teenagers. Programmes of educational intervention have tended to concentrate on children in the pre-school and early school age group. Two exceptions are the Middle Start programme mounted by Oberlin College in America and Instrumental Enrichment based on Feuerstein's work. Middle Start is a six-week summer programme of educational enrichment for young adolescents. Yinger et al (1977) make impressive claims for it though without spelling out what the programme comprises

in detail. Instrumental Enrichment is based on work with adolescent immigrants in Israel over a period of some twenty years. Faced with an influx of grossly disadvantaged youngsters, Feuerstein (1980) sought to develop assessment procedures that would identify *potential* as opposed to *present* functioning. This procedure – the Learning Potential Assessment Device – led in turn to a programme of instrumental enrichment. This seeks to make up learning deficiencies by concentrating on the *processes* of learning and helping young people to learn efficiently rather than teaching them specific content. The programme comprises pencil and paper activities designed to encourage systematic exploratory behaviour, making comparisons, problem solving strategies and so on. It has evoked a great deal of interest and is being used in a number of countries. Evidence about its efficacy has been limited however. A small scale study is currently taking place in five LEAs under the auspices of the Schools Council and this should add to the information about Instrumental Enrichment.

An important development in the curriculum for older pupils is the emergence of integrated programmes designed to prepare young people for transition to adult life. There is some evidence to suggest that school leavers' programmes are on the increase, but these are undoubtedly variable in quality (Hill, 1976; Jerrold and Fox, 1971; Nesbitt, 1977). A further factor making for revised curricula at both school and college levels is the pressure of youth unemployment. These leavers' programmes, design for living courses, and so on, see preparation in a broad sense and subscribe to the idea that 'how to live' is just as important as 'how to work' (Baranyay, 1976; Brolin and d'Alonzo, 1979). Here basic literacy and numeracy, vocational, and social skills are usually given equal priority. It should, however, be noted that a multiplicity of definitions and interpretations of social and life skills remains, so that the title alone gives little indication of actual course content, which may range from survival skills to job training. It would, then be useful to have detailed information and evaluation on these courses to ensure that they are providing for real needs.

A number of research studies have suggested areas of study which should be included in the curriculum for this age group: finance (Brown and Dyer, 1963), reading schemes stressing social competence (Gunzburg, 1965), social activities practised in the local community (Baranyay, 1971), sex education (de la Cruz and Veck, 1973), and activity training, including occupational and leisure pursuits (Gunzburg, 1974). Wehman (1975) has proposed a social skills curriculum based on four increasingly complex levels: personal care; primary interaction; job and community survival; and advanced interaction. Certainly there is widespread agreement on the need for a carefully structured programme of personal-social development as well as for prevocational and vocational instruction (Halpern, 1979; Warnock, 1978). There is, however, considerable disagreement and lack of experience on what should be taught, by what methods and where it should be taught.

In the case of special schools, leavers' courses have made progress, albeit with more limited aims, to provide simple language and number skills and to encourage maximum independence (Rowan, 1980). For those in mental hospital schools education is concentrated on enabling young people to become socially acceptable and, if possible, to learn social sight vocabulary. However, in many ways the most difficult problems for those responsible for providing educational opportunities are presented by young people who, while intellectually able, are very severely physically handicapped.

Three broad areas of adult life are generally identified in defining curricular objectives: work, social and life skills, and leisure. There is of course some degree of preparation that *all* pupils require, but for others this will be insufficient and certain specific interventions may be needed. All pupils are likely to require careers education and guidance, but in the other two areas specific preparation is not usually judged to be necessary for the majority. Preparation for adult living in a more general way varies enormously in content, depending as it does on the nature of particular students' needs, and such factors as the local employment situation, the urban/rural locality etc. Hegarty and Pocklington (1981) have noted wide variations ranging from formal courses to an informal general emphasis across the curriculum on matters relevant to adult life. Formal courses are usually followed along with other pupils, sometimes with supplementary work being given in a special centre or on a withdrawal basis. They include practicalities of independence such as form filling; job applications; money; using the telephone; domestic skills; visits to shops; post offices and stations; home and road safety; conversation and other social communication skills; personal hygiene; and sex education. Findings on the sexual experience of young people with special needs have established that they manifest considerable ignorance on sexual matters, probably far greater than is the case among their peers (Brant and Hansen, 1972; Dorner, 1977; Scott et al, 1975). Research on case studies in sexuality and handicapped people for use in education, training and counselling is currently being carried out by Rae at York University Department of Education under the sponsorship of the IPPF Europe.

An additional area in which students with special needs may require specific preparation is in the use of leisure time, since they may find themselves not only more reliant on leisure activities as a way of spending their time constructively, but also less able to take part in the normal leisure activities engaged in by their peers. Several studies have provided evidence on the restrictions on leisure activities of families with a handicapped member: Butler et al (1978) on the multiply disabled, Gregory (1976) on the hearing impaired, Anderson and Spain (1977) and Woodburn (1973) on spina bifida. For the young people themselves the constructive use of leisure time is now regarded as especially important. Unfortunately, as Nesbitt's (1976) study of special schools showed, leisure is often seen solely in terms of hobbies. Similarly, Hegarty and Pocklington (1981) have observed from their study of a wider range of schools

that a near-exclusive concentration on basic skills often leads to an impoverished curriculum for these individuals. These researchers conclude that, while many leisure activities can be taught on an integrated basis, others may require special provision or extra tuition. They note that schools generally favour encouraging the handicapped to join main school activities. A study currently being undertaken by Travers at Exeter University School of Education is examining the effects of physical education and sport in schools and adult centres for the mentally handicapped. The recognition that the family, and parents in particular, can act as important change agents here is the basis of another current investigation being undertaken at the Hester Adrian Research Centre under the sponsorship of the DHSS, which is examining parental involvement in social skills and leisure activities of ESN(S) school leavers.

The importance of the hidden curriculum should not be forgotten. School and college structures and the quality of relationships within them clearly illustrate the value placed on various kinds of activity, behaviour and ability (Hargreaves, 1967). Indeed it has been suggested (FECRDU, 1980) that the hidden curriculum may actually be a more potent source of social learning than planned classroom provision. This does not, however, imply that it is sufficient to subject a student to a varied range of experiences in the hope that he or she will benefit from them. Systematic planning and structuring of courses is essential, together with an on-going process of evaluation which will feed back into the curriculum and allow for future improvements to be made.

Research is now needed to assess the appropriateness of curricular objectives in meeting special educational needs and to devise methods for monitoring student progress. The development of suitable teaching materials is also an area to which research effort should be directed.

A study currently in progress at the Hester Adrian Research Centre has major curriculum implications for older adolescents. This is the Habilitation Technology Project run by Whelan from 1977-1983. This is developing learning packages for use with mentally handicapped and developmentally delayed adolescents and adults in adult training centres. The project is building on previous work at the Centre and utilising an action research methodology. Thus, the work is carried out in close collaboration with some thirty adult training centres in the North West whose staff are involved in developing and evaluating the materials. The aim is to produce 'a comprehensive set of habilitation packages, available, thoroughly evaluated, and in use in the field by practitioners'. The system being developed, known as Copewell, is divided into four sections: self-help; social academic; interpersonal; and vocational. It will comprise 174 teaching packages, of which 73 have gone through the first stage of development.

The use of sign languages, both for the hearing impaired and those with severe learning difficulties, is a further matter for current curricular concern. Kiernan of the Thomas Coram Research Unit has recently completed a project on the use of sign language with ESN individuals aged between 7 and 18 under the sponsorship of the Medical Research Council. In addition the DHSS is sponsoring work on the relationship between sign training and speech development for the mentally handicapped which is aiming to describe current teaching practices and to offer a set of procedures to maximise the likelihood of speech.

Continuing developments in microelectronics must be an important consideration here. One research project currently in progress is, for example, investigating techniques for improving the speed at which severely handicapped individuals can communicate using a microprocessor based aid. This work is being undertaken by Poon at King's College Department of Electronic and Electrical Engineering with sponsorship from the Nuffield Foundation. The International Project on Communication Aids for the Speech-Impaired, based at RADAR, is assembling information on communication aids and hoping to stimulate research and development in the area. The recent report from the Council for Educational Technology (1981) has suggested a number of areas where research by outside bodies is needed to complement their own development work for young people with special educational needs. The uses of microelectronics to influence cognitive development, to act as a communication aid for the deaf, and to enable the non-communicating and autistic to use speech in a purposeful way need detailed clarification. The training of special education teachers might also benefit from the use of microcomputers. Innovations in the development of computer languages could also have great relevance to students with special needs by offering them the experience of activities which are currently denied them. It is suggested that research and development work could be combined in the production of curriculum materials by higher education multidisciplinary teams. The development and evaluation of software for students with special needs is envisaged as including four main types of material: software produced for ordinary education; software modified for use by the blind and physically handicapped; software produced primarily to meet the needs of those with learning difficulties; and materials with especial relevance to those with special needs, including software to enable the severely handicapped to communicate, devices for the multiply handicapped and robotics. In addition it is proposed that specialist courses be run for teachers as part of their in-service training, and that resource centres be established on which teachers may draw for materials, information and advice.

The potential contribution of microelectronics to the curriculum is enormous and must be regarded as an important development area for research.

1.4 Attainment. There have been few studies of the educational attainments of this group. Numerous studies have documented the attainments of younger pupils but there has been far less concern for the formal educational achievements of adolescents. Such studies are of course predicated on a system of

categorisation that, as we have noted above, has limited relevance to educational planning. They do have a role however. For example, they would assist in testing out Gunzburg's (1974) suggestion that there is intellectual development after the age of 16 in mentally handicapped people or the frequent anecdotal claims that hearing impaired adolescents show a dramatic increase in language competence in the years immediately after school. (There is a dissertation by Follwell (1943) that produces some evidence of gains in social and communication skills in the two years after leaving special school.)

A large-scale survey of ESN(S) schools in the North West has been carried out at the Hester Adrian Research Centre. This provides data on 4,000 pupils, some of them in the older age range. A full report is forthcoming (Mittler and Preddy, 1981). Leeming et al (1979) report on a language survey carried out on a sample of nearly 1,400 pupils at ESN(S) schools in the Cheshire, Manchester and Stockport areas. A general finding was that while the youngest children showed relatively rapid development older pupils made very little progress: 'The large gains shown by children in the early years of school were not sustained, the period between the age of six and school leaving is one of extremely slow growth in the language behaviours we have examined, and the final levels reached by many of the children leaving school at 16+ are low'. This corroborates Marshall's (1967) survey finding that leavers from Junior Training Centres (which preceded ESN(S) schools) were performing at an average level that corresponded to that of a normal five to six-year-old. Writing elsewhere about the survey, Mittler (1979) points to evidence of a 'sudden spurt in language skills in the last year before school leaving'. Thus, between the ages of 15 and 16 there was an increase in the number of young people who had reached a significant milestone. The subsample was small however and the findings must be regarded as tentative.

As part of a larger study into the education of the deaf, focused on the notion of internal speech and its relevance to educational practice, Conrad (1979) conducted a survey of deaf school leavers of England and Wales. This covered 359 pupils attending schools for the deaf and 128 attending units for the partially hearing. These were aged 15-16½ and constituted almost all testable pupils available. Attainment data were collected on reading, lipreading and speech production. Reading was measured by means of the Wide-span Reading Test (Brimer, 1972); the median reading age for the group was 9·0 years.

A study being conducted by Zangwill at the University of Cambridge is following up a group of children with specific learning difficulties admitted to the Word-Blind Centre in Cambridge some years ago. These are now in their early twenties. This project will provide data on their progress in reading, spelling and related skills, as well as examination results and occupational history.

The Research Centre for the Education of the Visually Handicapped at the University of Birmingham is conducting a longitudinal investigation of cognitive development and educational achievement in blind and partially sighted children. This commenced in 1973 with a sample of 120 infant age children. These are now aged approximately 13 and so fall outside the terms of reference of this review. It is intended that the investigation will continue however and it will provide a most useful core of longitudinal data. Attainments being measured are reading (accuracy, speed and comprehension), language development and mathematics. An interim report is presented in Tobin (1979).

2 Vocational

Questions relating to the transition from school or college to the world of work are not limited to the time between leaving full-time education and entering first employment. Rather they must be regarded as components of a continuous process of preparation for and experience of adult life. Whether youth unemployment is seen as a cyclical event or as the consequence of more fundamental structural changes is the subject of controversial discussion, which in turn leads to quite diverse views about the most appropriate measures to be taken for ensuring this transition. While it is clear that the problems involved here apply in principle to all young people, it is also apparent that certain groups are more vulnerable than others. Thus individuals with special educational needs will often require more structured and intensive help.

In this section approaches to meeting the vocational needs of these young people are discussed. They include approaches to career education and careers guidance, work preparation and work experience. In addition research findings relating to their experiences of obtaining and keeping jobs are considered, together with the implications of what is for some the real possibility of living without work.

2.1 Careers Education. Careers education must be regarded not as an addition to the general education of young people but as an integral part of the whole process of preparation for adult life. It has, however, been found that young people with special needs are three times as likely as their peers to have been in schools at the age of sixteen which did not have a formally designated careers teacher (Walker, 1980). The same investigation demonstrated, moreover, that they were also less likely to have attended careers lessons in school or to have been given advice about applying for jobs and being interviewed. A survey undertaken by the DES (1973) found that only half of special schools had a careers teacher, and that only half of these teachers had received any systematic training for their role. It emerged that careers education in special schools is more concerned with social development than with preparation for work. Warnock (1978) expressed dissatisfaction with current careers guidance arrangements and recommended that a teacher with special responsibility for careers guidance should be appointed in every special school which caters for older pupils and that in every ordinary secondary school there should be at least one careers teacher with additional training or expertise in understanding the career implications of different types of disability or disorder (para. 10.14).

In Nesbitt's (1976) survey of ESN(S) schools there was an overriding belief among staff that adult training centres provided the only possible placement opportunities for students both in the short and long term. Nothing appeared to have been done to offer them an introduction to the kinds of jobs for which they might have been trained and very few contacts had been made with employers who could send representatives to the schools to describe their work. It is, then, hardly surprising that ATC trainees have been found to have little idea about the nature of specific jobs and the demands that they would make on their incumbents (Reiter and Whelan, 1975).

A tendency has existed for careers education to be regarded simply in terms of passing on information on prospects, pay, hours and training requirements, and similar tangible aspects of different kinds of work. In recent years, however, it has been found that broadening the nature of the information made available is a distinct and important trend (IFAPLAN, 1980). This arises from the belief that careers education should encompass all life areas, including occupation, and that teachers should relate subject matter to its career implications wherever this is possible (Brolin and d'Alonzo, 1979; Hayes and Hopson, 1971; Watts and Herr, 1976). Increasingly, information on the social aspects of working life is therefore being added, including the sorts of interpersonal relationships that can be expected in the work situation and the kinds of physical and psychological strains that might be encountered. Careers education is also beginning to include information on unemployment, specially created jobs and the possibility of voluntary service. For example, the specially appointed careers service officer in Sheffield who is working under the auspices of the European Communities 'Transition from School to Working Life' project, has included information about all aspects of unemployment in the newly developed career education curricula in the three project schools.

Despite this general trend towards improving career education provision, the evidence cited earlier would indicate that this trend is not significantly reflected in the provision for students with special educational needs. Future research in this area should aim to identify appropriate structures and methods to extend recent developments to this group. Perhaps the most important question to be answered is how to get these young people to receive, understand and use the available information. The traditional emphasis on the passive reception of information would appear to be inappropriate as a means of encouraging the assimilation of information relating to the affective aspects of work, such as social interaction and interpersonal relationships. Moreover, the limited literacy of many of the young people reduces the value of printed sources of information. Action orientated methods would therefore seem to be essential. If the mass of specific information is to be effective, young people with special needs must be helped to gain a general understanding and knowledge of the working world to which this information can then be related.

2.2 Careers Guidance. The decision about whether to leave or to stay on at school and the advice young people receive at this critical stage are likely to have a significant impact on their later lives. There is, however, evidence that those individuals with special needs are less than half as likely as their peers to have spoken to anyone about leaving school and, in particular, are significantly less likely to have spoken to a careers officer or careers teacher. This disturbing finding is derived from a major study by Walker (1980), with a sample selected from the National Child Development Study (Butler and Alberman, 1969; Davie et al, 1972; Fogelman, 1976). In this same investigation a comparison within the handicapped group revealed an important difference between the unemployed and those who were working. The unemployed were unlikely to have seen a careers officer and had relied instead on advice from parents or friends, while those in work were more likely to have consulted a careers officer rather than turn to informal sources. An additional finding, which applied both to those with special needs and to their peers, was that almost half of the sample reported that they had attended schools that had no contact with employers.

On the question of seeking advice about actual career opportunities, Walker's (1980) study provided evidence to suggest that young people with special educational needs were only slightly less likely than their peers to have discussed the matter with a careers officer: 75 per cent compared with 80 per cent. Small proportions of both groups had received advice from careers teachers, other teachers, relatives and friends. Those who had very stable employment records were more likely to have consulted a careers officer than those with unstable records. Among the individual handicapped groups, the physically handicapped were the most likely and the maladjusted the least likely to have seen a careers officer or disablement resettlement officer rather than less expert sources of advice. Overall, there was some evidence to suggest that one explanation for the fact that certain of these young people had not consulted the careers service was that they had never heard of it.

The policy statement of the National Bureau for Handicapped Students (1977) stressed the need for the careers service in each local authority to be responsive to the special requirements of handicapped people. During school and further education and at the time of leaving careers officers would perform a vital role in work placement and work experience. Panckhurst's (1980) study of the further education sector in fact found that the careers officer was an important figure in all the work orientated courses offered by the colleges under investigation. In some cases the careers officer took responsibility for finding jobs for leavers, and in others worked closely with the course tutor. The home careers officer was the link person in cases where young people were in a provision away from home. Sometimes colleges were in direct contact with the home careers officer, but more often liaison was undertaken through the local specialist careers officer. Panckhurst (1980) also found that the careers service played an important part in college selection and admission procedures. This study was, however, limited to a small number of colleges. A much

larger investigation is now necessary to give a broader picture of the role of the careers officer in the further education sector as a whole.

Certainly Walker (1980) was forced to conclude of the school sector that the careers guidance offered to disabled young people was a seriously neglected area. This conclusion confirmed the evidence of earlier research (Fogelman, 1976; Lambert, 1978), which suggested moreover, that students with special needs are receiving least careers guidance in school at a time when their disadvantage in the labour market would point to a need not only for equal but for extra help (Walker, 1980). In the case of careers teachers various studies have shown that they are not given the time, training or support necessary to perform their role effectively (Roberts, 1971; DES, 1973; Kirton et al, 1976; Engel and Foster, 1977).

On the operation of the careers service, Walker (1980) observed that most success was achieved with the physically handicapped and least with the ESN(M) and maladjusted, who were overall the least likely to have seen a careers officer, but had the greatest difficulty in securing stable employment. Indeed, it has been observed (Cochrane and Marini, 1977) that vocational counsellors of all kinds will find their skills challenged as they assume responsibility for assisting the least academically able. While they may not necessarily be required to develop totally new skills, they will need to use existing skills in new and creative ways. More information is now needed on the type of counselling given to young people with special educational needs, as well as on the role and function of the careers service in relation to this group.

It has been observed that the careers service is often stronger on national than on local information (IFAPLAN, 1980). A largely untapped source of local information lies in parents and the local community yet this has rarely been used in any systematic way. One of the British pilot projects being carried out under the overall auspices of the European Communities is, however, exploring the possibility of using these sources to provide advice, information and perhaps points of entry for individual or group visits to local industrial concerns. This initiative may have important implications for the organisation of assistance given to those with special needs.

2.3 Work Preparation and Work Experience. Specific preparation for the world of work is a relatively new departure in schools. Work experience programmes are however increasingly finding their way into fifth year curricula since the Education (Work Experience) Act 1973 permitted pupils in their last year of compulsory schooling to take part in work experience schemes. There is little systematic information, much less evaluation, of this development. Typically, a programme will entail working at a real job outside the school on one day a week over a period of time or continuously over a number of weeks. The work experience component of the Trident scheme is perhaps the best known. Hegarty and Pocklington (1981) have documented a number of examples, discussing the organisation of programmes, types of work carried out, and associated problems and issues. Roberts and Williams (1980) describe a work experience scheme for pupils with learning difficulties, mostly moderate but some severe, in a Midlands comprehensive.

Speake and Whelan (1977) provided the first large-scale investigation of Young Persons' Work Preparation Courses, whose primary role is to help physically and mentally disabled school leavers to get and keep a job. The study comprised a survey of the general characteristics of all the courses currently available together with an evaluation of their effectiveness in meeting the needs of these young people. Almost two-thirds of the students came from special schools and over one-third from comprehensive schools. At the end of their course 21 per cent had been placed in jobs, though the researchers do suggest that longitudinal data would be necessary to provide a more realistic picture of the students' employment histories. A number of problems were observed which the researchers felt were in urgent need of resolution. Staff reported that they had inadequate information on the young people who were accepted for the courses, which suggested a need for more detailed forms for recording admission data, a more systematic programme of initial interviews, and closer liaison with the feeder schools. It was also noted that little standardisation exists in the assessment methods in use, particularly in the workshop situation. The majority of the instructors and occupational supervisors expressed a need for greater opportunities for contact with external colleagues both to exchange information and to draw on one another's expertise and experience in improving their current practice.

The effects of the courses on work performance, behaviour, self-concept and social competence were assessed. Speake and Whelan noted improvements in work performance and social competence as well as on variables important to work adjustment, but almost half of those participating in the study showed an increase in negative behaviours, with worsening emotional stability. Other research has demonstrated significant improvements on completion of systematic industrial and social competence programmes (Baranyay, 1971; Gunzburg, 1968), while periods of work experience have been shown to result in an increased differentiation of vocational needs (Brummer, 1974) and improvements in vocationally orientated behaviour (Puglia, 1976), achievement motivation and self-esteem (Majumder, 1973). Much of the research in this area is, however, American and it must be concluded that there is a need for corroborating evidence derived from the British context.

An additional finding from the Speake and Whelan (1977) study was that while the work environment created during work preparation courses was felt by supervisors to be fairly realistic, it was regretted that this realism was limited due to the lack of urgency in the absence of the drive to create a marketable product. Certainly Browne (1981) writing from his own experience of the Bridgend Industrial Unit stressed the need to avoid diversionary tasks, which students quickly recognise as such. In the Bridgend Unit an atmosphere as near as possible to an industrial

environment is established by making the learning process a by-product of work and social relationships at work. Contract work with local firms is the framework used to support this programme of what Browne terms 'covert education'.

Workshops in the United States have a more social orientation including specific teaching in speech therapy, recreation, social skills and self-sufficiency. In Britain, and indeed in Europe generally, work experience is more often taught and supervised by people with industrial or crafts backgrounds. It has been argued that the high expectations of the latter regarding performance lead to better and more skilled work being produced (Carnley, 1977). Speake and Whelan (1977) also believed that work preparation courses should not move towards a change in focus involving a fuller curriculum on preparation for adult life, since they saw this as more appropriate to other educational contexts in which courses could operate on a less limited time scale. A similar conflict of opinion exists with regard to the role of the adult training centres. While some argue they should aim to provide a more varied range of work, work training, further education, social education and structured training in the use of leisure time (Campaign for the Mentally Handicapped, 1972; Redford, 1975; Warnock, 1978; Whelan and Tomlinson, 1975), others contend that training in social skills and in general work skills should take place away from the centres (Stanway, 1977). The question has been raised whether broadly based vocationally orientated courses are able to identify tasks that promote transferable skill capacities. Moreover, research undertaken on the variety of methods used for task training has provided no definite evidence as to the superiority of any particular approach over others (Standahl, 1972; Tomlinson and Whelan, 1977). Nor, indeed, has consensus been reached on appropriate methods for teaching vocationally related skills and concepts (Goodwin, 1977; Hull, 1977), or whether such teaching is most effectively undertaken in a classroom or industrial environment (Weiss, 1976; Clark et al, 1975; Brown and Dyer, 1963).

The Manpower Services Commission is conducting a survey of Work Introduction Courses in operation in Spring 1980, which will examine organisational factors, staff, teaching approaches and curricula. An evaluation of Work Introduction Courses is also being undertaken which aims to develop future provision and to assess the possible nature of future clients. This latter is being carried out under the auspices of the MSC on a joint basis by the Hester Adrian Research Centre and Bolton College of Education (Technical) and an interim report is expected in Summer 1981. Several other surveys, evaluations and local labour market studies conducted by the MSC are not directed specifically towards the disabled, but may be expected to produce results which will have implications for them.

AFASIC is working with the Applied Psychology Department of the University of Aston on a project examining the ways in which specific speech and language disorders affect young adults in terms of training for and obtaining employment. Data will be gathered from educationalists, speech therapists and, if possible, young people currently in employment. It is hoped that suggestions will be made as to the optimum methods for training young people with language disorders.

The recent report from the Further Education Curriculum Review and Development Unit (1981) has observed that vocational preparation is currently unco-ordinated, unevenly provided and lacking in status. It is suggested that although college-based pre-employment, YOP and UVP courses share common components and serve similar needs, separate administration arrangements lead to inequality of opportunity and militate against the possibility of transferring between courses. The FEU report therefore recommended the creation of a coherent programme based as much on the self-perceived needs of the young people who are participating as on the requirements defined by educators, trainers and employers. It is recognised that the less able student may be expected to receive particular benefit from vocational preparation. For young people with special needs the new form of assessment recommended in the report must be regarded as an important step. It is suggested that a profile record of attainment would facilitate progression from one scheme to another, while providing a common system of record keeping and certification and allowing recognition of personal qualities which cannot be formally assessed. It would now be valuable for a research investigation to examine the feasibility of these recommendations and to suggest how they might be put into practice.

Within the further education sector the most successful provision has arguably emerged from approaches which combine work experience, social learning, and basic literacy and numeracy. Among the most notable examples of such an approach are the Bridgend Industrial Unit and the North Nottinghamshire Work Orientation Unit. Wherever social education takes place, the fact remains that research overwhelmingly supports the view that personal and social as well as daily living skills are significant determinants of vocational success. This is, of course, equally true for those with special educational needs and for their peers (Domino and McGarty, 1972; Fester and Gambra, 1972; FECRDU, 1978). It is simply that those with special needs may require more systematic and intensive help in acquiring these skills. Certainly the ability to do a job is not synonymous with the ability to keep it. Studies of job failure in mentally handicapped populations have consistently indicated that jobs are lost not because of an inability to do the work itself, but rather because of a failure to adjust to the social demands of the world of work (Gold, 1973). In addition there is some evidence to suggest that retarded individuals tend to sustain vocational goals and images of employment that are often unrealistic (CERI, 1979; Knight, 1972).

As part of the OECD initiative, a retrospective study is proposed with the aim of assessing the effectiveness of education and training courses in helping young people with special needs to get jobs. A small sample (21-25) of young people with different physical, mental and sensory handicaps will be interviewed. Their education and training will be traced back from their current

situation of either work or unemployment. It is intended that existing studies on young people with special needs in the UK, France and Norway will also be drawn upon.

It has already been noted that adult training centres have frequently been criticised on the grounds of insufficient provision for young people in the area of social and life skills. Relying as they do on monotonous contract work, the question has been raised as to whether trainees are in fact being exploited by the present system (Beresford and Tuckwell, 1978). A survey of provision for the handicapped conducted by Baranyay (1976) in fact concluded that there was little agreement on what the overall purpose of the ATCs should be, but that suitable alternative provision had yet to be found. The national survey of adult training centres by Whelan and Speake (1977) found that a third of their respondents reported that their aim was to prepare individuals for open employment, yet only 3·9 per cent of trainees actually entered open employment and 0·4 per cent sheltered employment. And this despite the fact that 11·5 per cent and 25·8 per cent of trainees were considered ready for open and sheltered employment respectively. The researchers placed much of the blame for this not on inadequate preparation but on inadequate job placement procedures.

Brolin and Kokaska (1974) have outlined seven critical issues which are in need of resolution before job placement can be successfully achieved: vocational adjustment; sufficient employment opportunities; adequate skill evaluation; training considerations; responsibility for employment; the use of value laden labels; and a feasible placement approach. The complex interaction of these variables means that action is required at a variety of different levels. While issues of labour market opportunities and the labelling of handicap need positive discriminatory action at the level of the wider society, other issues itemised here have implications for the organisation and content of work preparation schemes. For a genuine assessment of the rate of success of different approaches to work preparation and work experience long-term follow-up studies are now urgently needed.

2.4 Employment Experiences. Along with the growing recognition that young people with special needs constitute an important component of the labour force, there is increasing concern at the continuing reluctance of employers to provide work opportunities for them. Research has ascribed this variously to prejudice (Rickard et al, 1963; Rosen and Komorita, 1969), uncertainty about how the individual will perform (Halperin, 1973), and fear of an increased risk of accidents (Nagi et al, 1972). These misperceptions persist in the face of evidence that continually disproves them (Goodyear and Stude, 1975; Kettle, 1979; MacIntyre, 1976). It has been found that with adequate assessment and training procedures, and given real opportunities, individuals with a range of disabilities are able to perform at a high level (Employment Service Agency, 1976; Esser, 1975; Slater, 1977). Research on strategies for improving work performance has, moreover, suggested that both tangible and intangible reinforcement can effect improvements among workers with special educational needs (Goldberg, Katz and Yekutiel, 1973; Matson and Martin, 1979).

The labour market disadvantage suffered by young people with special needs has been clearly demonstrated from official statistics (Walker, 1976). In a period of high unemployment it must be expected that they will often need advantages above those of their peers, if they are to be successful. Financial incentives might act to encourage some employers to take on these young people, but they will never overcome the fundamental problem of prejudice. It is, then, more important to discover effective ways of disseminating a new image of them to prospective employers. The information currently available to employers has often been found to be wanting. It has, for example, been suggested that the services of the Disablement Resettlement Officers and the Employment Medical Advisory Service have not been brought to the attention of employers as well as they might have been (Kettle, 1979). This is an area in which research studies could make a valuable contribution in evaluating existing dissemination channels and outlining possible improvements for the future.

Very little information is available concerning the opportunities for and experience of employment among young people with special needs. Although there have been major British studies carried out on school leavers, such as those by Carter (1962), Maizels (1970), the Schools Council (1968), Thomas and Wetherell (1974) and Veness (1962), none has dealt specifically with the problems encountered by those with special needs. The few smaller studies that have investigated this aspect of the transition to adult life have been concerned almost exclusively with groups of young people with particular impairments or handicapping conditions (Ferguson and Kerr, 1960; Rodda, 1970). For systematic research evidence on a wider population it is necessary to turn to the major study commissioned by the Warnock Committee and undertaken by Walker (1980), which has already been cited in relation to its findings on the question of the careers guidance received by school leavers. The study took place when the young people were eighteen years of age with a view to providing basic information on their employment experiences, and to exploring some of the reasons for their success or failure to obtain and keep a job.

Walker's (1980) survey data revealed that young people with special needs were less likely than their peers to get a job immediately after leaving school. Fifty-four per cent of the physically handicapped, 71 per cent of the ESN(M), and 70 per cent of the maladjusted, compared with 82 per cent of the non-disabled obtained employment on leaving; while 12 per cent of the physically handicapped, 5 per cent of the ESN(M), 11 per cent of the maladjusted and 2 per cent of the non-disabled were unemployed for three months or more. A greater proportion of those who had found the transition from school to work difficult were employed in unskilled jobs than of those who had found it relatively easy.

For special school leavers there is evidence to suggest that a considerable proportion of unemployment is in the months directly after leaving school; that is, at the time when morale is easily undermined for any young person (Tuckey et al, 1973). The disadvantage engendered by this fact is apparent in the clear relationship that has been shown to exist between a successful early employment history, as measured by proportion of time spent in work and stability of job record, and an immediate transfer from school to work.

A study currently being undertaken by Jowett at NFER is following up students admitted to the Further Education Unit at St Loyes College for Training the Disabled for Commerce and Industry. The information obtained by questionnaire and interview will cover such areas as: vocational and social progress; the relationship between the nature and degree of handicap, employment experience and likelihood of continuing in employment; the relationship between the training course followed and the individual's subsequent employment record; and students' perceptions of the further education course. It is anticipated that this information may indicate how the present curriculum should be revised to be more successful in meeting students' needs and expectations, and may identify difficulties experienced by former students after leaving the Unit.

Related investigations are being carried out elsewhere with particular reference to young people with spina bifida, hydrocephalus and cerebral palsy. The Association for Spina Bifida and Hydrocephalus is sponsoring two projects: one examining the training and further education of adolescents with these conditions is based at Derwen College; another investigating the effects of hydrocephalus on vocational and non-vocational training is based at Banstead Place. A longitudinal study on young people with spina bifida is being sponsored jointly by the DES and ILEA and is based at the Thomas Coram Research Unit; while Professor Lawrence of the Welsh National School of Medicine has recently completed work on young people with this condition with the support of Action Research for the Crippled Child.

There are a number of other studies concentrating again on specific types of disability rather than on a wider population of young people with special needs. The DHSS is sponsoring work at the British Epilepsy Association on the transition from school to work and the problems encountered during this period by epileptic school leavers, and at Aston University on the visual and employment capabilities of the blind and partially sighted. The Joseph Rowntree Memorial Trust is supporting a follow-up and comparative study at University College Swansea of school leavers with Downs Syndrome and their families in the South Wales region.

There are currently three projects investigating the experiences of a wider population of school leavers with special needs. One is being carried out under the sponsorship of the DHSS by Jeffree of the Hester Adrian Research Centre. Another is following up fifty young people who left three residential schools during 1974-75. This is being undertaken by Laslett of Birmingham University Special Education Department with sponsorship from the Planned Environment Therapy Trust. The third is a longitudinal study of the further education and employment experiences of Scottish school leavers being financed by the Scottish Education Department and carried out at the Scottish Council for Research in Education. This latter comprises four studies: the first consists of case studies of vocational guidance for pupils with special needs available in schools; the second is focusing on course provision in the further education sector, the organisation, content, methods and materials used on courses, and staff and student assessment of these; the third study will concentrate on the educational efforts of adult training centres on behalf of young people with special needs both as internal provision and in association with colleges of further education; the final study will be a longitudinal investigation of the transition of a group of young people with special needs from school to further education and employment.

Once a young person has secured a job, this does not mean that the process of transition is over. A number of new roles have to be learned and new requirements met. While effective preparation can make a vast difference to the way in which an individual will cope with the world of work, facing the practical realities of a job can present problems. The amount of on-the-job support a young person may require should not be ignored. Often the job placement is seen as the end of official responsibility towards the individual, yet this could be the point at which he or she may feel in particular need of guidance. As well as possible adaptations to the working environment and to the ways in which a given job has been performed in the past, young people may also need the support of informed co-workers. This is an area in which the OECD project on the Handicapped Adolescent hopes to make a contribution to our knowledge and understanding of the factors involved.

An investigation of employment services for young people with special needs is being carried out by Hyman at Goldsmiths College with sponsorship from the SSRC. Its main long-term objectives are: to observe the characteristics of disabled school or college leavers who are ready to be placed in open or sheltered employment or who may attend day centres; to observe the environmental factors which may be instrumental in their placement; to examine the level of congruence between assessments of the disabled person's work potential made by service providers, by family members and by the disabled person, and the long-term employment outcome; and finally to observe the level of use of available services, possible gaps in service provision, and the effect of intervention over time. The findings of this research must be expected to have far-reaching implications for policy in this area.

It is important, too, for research to assess the practical implications of the idea of continuing education for the young worker. Warnock (1978) strongly recommended that the education of young people with special needs should not be neglected once they have obtained jobs, and that employers should be urged to

allow release for this purpose on a block or day basis (para. 10.29). It was recognised that such an arrangement necessitates much closer links between local industry and commerce and colleges of further education, including joint discussion of the courses provided. It is, however, open to question whether employers are prepared to be so heavily involved in what many of them regard as college business, as the recent experiences with the design and organisation of TEC courses has shown. Again, research identifying the most successful ways of communicating with and involving employers is urgently needed.

2.5 Living without Work. As society is presently structured, work has important ego-preserving functions; loss of work or inability to obtain employment is a considerable threat to the ego, and for young people with special needs wishing to prove themselves in society this must be expected to have especially important consequences. There is evidence to suggest that a relationship exists between unemployment and vulnerability to depression (Brown and Harris, 1978), which would appear to derive in part from the practical problems of how to get through the day. Work provides a definite structure and, indeed, it has been suggested that the provision of this structure is one of the main benefits of attending adult training centres and day centres (Tizard and Anderson, 1979). In addition, it has been pointed out that the income derived from employment is a crucial factor in determining the range of other social roles that an individual may occupy (Schechter, 1977).

In the foreseeable future it seems likely that the inability to find work will be a reality for many young people across the whole ability range. For the handicapped this problem must be expected to be particularly acute. Social scientists have rarely given consideration to the idea of the constructive use of leisure time, though the situation created by the present economic climate would suggest that work in this area will increase. For some young people with special needs opportunities may be presented by adult education classes or by the challenge of running their own homes. It has also been argued that they could make an important contribution to society by undertaking voluntary work, which at the same time would benefit them by producing an increase in self-confidence and personal development (Tizard and Anderson, 1979; Warnock, 1978), though the question of payment for such activities has yet to be resolved. It should, however, be noted that there is considerable disagreement over this whole area, some refusing to entertain the idea of preparing young people for a life without work. The issues and implications involved here need to be clarified through a research study.

3 Social and emotional

Young people with special needs may face social and emotional problems that have considerable relevance for educational and vocational provision. These problems may be associated directly with a handicapping condition as when hearing impairment hinders easy communication with peers or they may arise from the interaction of special need with adolescence. Thus, young people with special needs experience the normal problems and uncertainties of growing up, but they are intensified in some cases as a result of their particular situation. In the first section we look at the problem of adjustment to disability which can become more intense with the greater self-awareness and consciousness of being different that adolescence brings and more immediate with impending adulthood. Then we report on the studies that examine social interaction between young people with special needs and their peers, and conclude with a note on the emotional and behavioural problems associated with adolescence.

3.1 Adjustment to disability. Much research effort has been concentrated on the individual's problems of adjustment to his or her disability. However, work in this area is clouded by the fact that the adjustment concept has not been sufficiently clearly defined – a fact which results in highly conflicting interpretations of the available evidence. For example, Mattsson (1972) has suggested that adjustment occurs when the individual accepts realistic limitations and is able to find satisfaction in compensatory physical and intellectual activities. By contrast, Tinkelman et al (1976) refer to the tendency to shift emphasis in the direction of the positive aspects of disablement as a means of reducing the anxiety engendered by envy of others. Hence, what Mattsson sees as successful adjustment is regarded by Tinkelman and his colleagues as precisely the opposite.

Many factors have been suggested as influencing the process of adjustment. However, while parental adaptation has often been shown to be a crucial intervening variable (Anderson and Spain, 1977; Davis, 1975; Fox, 1977; Pilling, 1975), there is a distinct lack of research evidence to establish the degree of influence exerted by other factors or to assess the effectiveness of the variety of coping mechanisms employed. A DHSS sponsored study of psycho-social adjustment in adolescents with spina bifida, hydrocephalus and cerebral palsy to identify some of the factors affecting their adjustment and assessing the adequacy of services available to meet them is in progress at the Thomas Coran Research Centre.

Mattsson and Agle (1972) outline three forms of poor adjustment: over-dependency, over-independency and isolation. The first of these reactions is seen as a response to parental overprotectiveness and the last to parental embarrassment. In terms of their implications for the social life of young disabled people it should be noted that there is some firm evidence to support the view that the social skills of disabled individuals are not as well developed as those of their peers so that they are in need of particular help in this area (Fulthorpe, 1974; McMichael, 1971; Philp, 1978). Richardson et al (1964) found evidence consistent with the idea that disablement results in lower levels of self-confidence and greater self-deprecation particularly among physically handicapped boys, who reported difficulties in interpersonal relationships. More recent research studies have corroborated this finding (Philp, 1978); and similar evidence has been reported with a sample of retarded adolescents by Beveridge (1979).

Studies on locus of control change techniques – whereby individuals are encouraged to take personal responsibility for their actions – have shown these to be important variables in training for adult life (Gardner and Beatty, 1980). Few investigations have been undertaken to demonstrate the implications of this for the disabled, though it might be expected that these would be of relevance to the problems of adjustment to disability. Indeed, Volpe (1976) did find that disabled young people often tend to adopt a 'patient' rather than an agent role.

Research on the relationship between disablement and the self-concept has produced few clear-cut findings (Minde et al, 1972; Goldberg, 1974; Shakespeare, 1975), though it can be said that the significant problems of establishing a self-identity among adolescents in general are likely to be especially acute among the disabled who may be unable to obtain sources of validation of themselves as individuals. That the self-concept develops through the individual's assessment and internalisation of the responses of others is widely supported by research. Moreover, the importance of social approval during adolescence is particularly strong (Collins and Thomas, 1972; Feldman, 1974; Strassberg and Wiggen, 1975). Hence, the peer group may be regarded as a primary agent of socialisation, having both instrumental and expressive influence on the development of the individual. The fact that the disabled often find themselves in a position of isolation must, then, be a matter of special concern.

3.2 Social interaction. Studies on the social relationships of young people with special needs have all shown them to be less socially involved than their peers. Social relationships and activities external to the school or college environment are particularly affected by disablement (Burton, 1975; Cull, 1974; Jarvis, 1978; Watson, 1972). Within the school setting it appears that neurological impairments are particularly likely to inhibit relationships, especially among boys (Anderson, 1973; Cope and Anderson, 1977). Social isolation has been found to be an important problem for the parents of disabled children (Hewett, 1970; Kew, 1975; Moroney, 1976; Spain, 1973) and it must be expected that this will in turn have its effect on the children themselves. Parents of disabled children, as well as the children themselves, are very likely to face social handicaps which arise from the dominant culture and its attitudes towards disablement and deviance generally. Goffman (1968), Birenbaum (1970) and Voysey (1975) have made especially relevant contributions to our understanding of the stigma associated with disablement, and it is evident from this work that the social nature of disablement means that research into its concomitants will inevitably be highly complex and must always be considered within its specific social environment.

Research has indicated a general consensus that visible disablement invokes negative attitudes in the non-disabled and that these have significant effects on the interactions which take place between the two groups (Brimblecombe, 1977; Dixon, 1977). Richardson (1971; 1976) and his colleagues (1970), studying the stigma to which disabled children are subjected by their peers, pointed to a high degree of cultural uniformity in attitudes to visible disablement. Anxiety and ambivalence towards the disabled result in strained social interaction in a variety of ways: the presence of disablement leads to inattention to other attributes relevant to the interaction; behaviour is overly formal and controlled; non-verbal behaviour is inhibited; and there is a tendency to approach less closely. At the same time, Corner and Puliavan (1972) have found that the stigma associated with disablement is often responded to and maintained by the disabled themselves.

A crucial element in considerations of social isolation is friendship and, as has already been shown, this is of particular significance during adolescence. Few studies have been undertaken specifically on the disabled, but it is possible to draw some implications from the wealth of material available on friendship and peer group relations among the non-disabled. An important and frequently misleading determinant of initial reactions is appearance. It has been suggested that physical attractiveness – which is itself a reflection of dominant social norms – acts as a 'gatekeeper' for interaction (Berscheid and Walster, 1974; Kleck and Rubenstein, 1975). The implications of this for the visibly disabled are obvious, and research has shown that even the label of handicap causes rejection among children (Jones, 1971). Moreover, the most important variable that has been associated with friendship is similarity and this too may have important consequences for the interpersonal relations of the disabled. There is some evidence from laboratory-based studies that the disabled individual is less frequently chosen as a partner in task completion situations (Gottlieb and Budoff, 1972). However, the implications of such findings are uncertain since the experimental set-up within the laboratory cannot in itself provide a sufficient explanation for purely social behaviour, since information is deliberately restricted and direct interaction frequently prevented. Thus psychological experiments on responses to a given or hypothetical stranger are vitiated as possible bases for examining real-life social behaviour by their failure to take into account the immense complexity of interaction between the variables involved. Only recently has it been asserted that the factors determining initial attraction may be qualitatively different from those determining prolonged friendship (Duck and Spencer, 1972; Levinger and Snoek, 1972) and sufficient evidence regarding their relationship has yet to be amassed. Canter and Barnitt (1978) have argued that friendship can in fact be analysed in terms of three components: similarity, compatibility, and reciprocity; the disabled tending to rely predominantly on compatibility.

Another area of research which undoubtedly has some relevance here is that concerned with implicit personality theories, whereby individuals believe that certain traits go together (Bruner, 1974). Hence a given disablement may be associated in the minds of interactants with handicap in other areas, and this in turn is likely to militate against the establishment of interpersonal relationships. Research on perception has, moreover, indicated that sociometric status is highly corre-

lated with 'sensitivity to the generalised other' (Sechrest and Jackson, 1961). Certainly popularity would appear to be related to high accuracy in perceptual judgements (Hearns and Seeman, 1971) but, as has already been seen, the social skills necessary to achieve such judgements are usually not sufficiently developed among many disabled individuals. It therefore seems fair to conclude, with Richardson (1976), that further research aimed at establishing the existence of social handicap for the disabled is superfluous. Rather, it should now be directed towards identifying ways in which the disabled can acquire the social skills to overcome problems created in interaction situations.

3.3 Emotional and behavioural problems. There has been insufficient research undertaken into the emotional and behavioural problems of disabled adolescents to allow any firm conclusions to be drawn (Anderson and Spain, 1977; Younghusband et al, 1970). The belief that the disabled child is almost inevitably likely to be more disturbed than his peers is less prevalent than in the past (Pilling, 1972; 1973), though there is some evidence to suggest that children do not expect their disabled peers to behave in a 'normal' manner (Morgan, 1972). Shakespeare (1975) has pointed to numerous ways in which particular difficulties in adolescence may be associated with emotional handicaps arising from physical impairment. However, research has to date failed to clarify the question of whether disabled adolescents have a higher rate of emotional disturbance as a result of their disablement since various studies have shown that many intervening variables – such as alienation between parent and child – are involved (Bagley, 1975; Dorner, 1977; Freeman, 1970; Rutter et al, 1976). Moreover the problems observed are common in adolescence generally and as yet insufficient controls have been used for significant progress to be made on the research front.

The majority of studies that have been carried out in this area have concentrated on emotional and behavioural problems of school children, so that the question of what happens when these children become young adults remains open. There are, however, two current research investigations which may be expected to contribute to our understanding of this issue. One is being undertaken by Herbert at Leicester University and is concerned with the behaviour modification of conduct disorders in children and adolescents in home settings; another, being carried out by Button at University College Swansea, with sponsorship from the Leverhulme Trust, is investigating the development of group work with disturbed adolescents.

CHAPTER 4

Contextual Variables

1 Assessment
2 Staff training
3 Support services
4 Housing and access
5 Disseminating information
6 Co-ordination and co-operation

The studies discussed so far have focused on special needs of the target group and the provision available to meet these needs. In this section we look at various factors pertaining to the context in which the provision operates. These can be an integral part of the provision such as assessment procedures that govern the allocation of young people to provision or the support services that when available greatly enhance provision; they can impinge directly on how the provision operates such as staff training; or they can be part of the general background such as housing and access.

1 Assessment

Assessment represents a particularly crucial issue in the education of young people with special needs. In all cases where an assessment is carried out its purpose must be quite clear in order that it may make an effective contribution to decisions about the individual's future. Warnock (1978) recommended an assessment process involving five possible stages, each of which would require a wider range of expertise than the last. As part of this process an individual's particular needs would be reassessed with his or her future prospects in mind at least two years before he or she is due to leave school; this reassessment should always involve a careers officer and should usually include other professionals in the education, health and social services (para. 10.7). This reaffirmed the conclusions of earlier studies stressing the necessity for close communication among all those involved (Hardy and Bordley, 1973).

A study by Fleming (1978) provides ample demonstration of the current lack of both provision and co-ordination in assessment services and procedures. Using questionnaires and follow-up interviews to gather information on young people who left ESN(S) day and hospital schools between 1973 and 1977, Fleming found that more than half had received no formal testing or assessment. Case conferences to make placement decisions had taken place for only two-thirds of the sample, 63 per cent of whom were placed in adult training centres and only two per cent in employment.

At the level of educational institutions assessment practices vary widely. In the colleges of further education Panckhurst (1980) found that students tended to be assessed in three modes: intellectual-academic; co-ordination-motor-perceptual; and social-emotional, each of which corresponds with a component of the special courses offered. He found, however, that the actual quality of assessment is uneven. The most effective methods operated where lecturers had broken down tasks and behaviour into relatively discrete elements which could then be rated on qualitative scales according to agreed criteria. Such rating scales were almost invariably observed in the special work-orientated programmes, and involved such areas as social and personal attributes, work-related behaviours, attitudes and self-concept. Assessment in the social-emotional area also appeared to be carried out with some success, while the most confusion was apparent in the assessment of cognitive skills. Here lecturers frequently expressed the need for guidance in the use of assessment techniques, suggesting that there was a distinct necessity for improvement, if they were adequately to meet the special needs of their students.

The development of assessment techniques related specifically to reading skills is the topic of two current research investigations. Work has recently been carried out at the Language Development Centre at Sheffield Polytechnic on the development of a criterion-referenced test of occupational functional reading ability for use with young people aged 16 plus; while the DES is sponsoring a project being undertaken by Trickey of Barking LEA on the production of a standardised battery of diagnostic tests concerned with reading related skills, each of which will have specific teaching implications.

A study recently completed by Tansley at NFER was focused on assessment procedures for the blind and visually handicapped in further education. Its aims were to examine tests and other assessment procedures in use at the two specialist FE colleges for this group (the Queen Alexandra College at Harbourne, Birmingham, and the Hethersett Centre for Blind Adolescents in Reigate); to determine whether any of these tests should be made more generally available; to identify any gaps in assessment procedures and to suggest how these might be filled. The interim report of this project (Tansley, 1981) makes three main recommendations. First, a range of external standardised tests should be tried out in each of the three colleges and their usefulness assessed over an experimental period; secondly, the possibility of constructing a test of functional vision should be investigated; and thirdly, the feasibility of producing a handbook relating to further education for the visually handicapped should be explored.

A great deal of work has been undertaken in the United States on the development and evalution of vocational interest and awareness batteries for the mentally handicap-

ped (Halpern, 1977; Halpern et al, 1975; Lofquist and Davis, 1970; Drugo and Cohen, 1970; Parnicky and Presnau, 1976). Overall the principal American effort has focused on obtaining scientific support for the existence of specific correlates of vocational adjustment and for the development and use of predictive devices. No such major research effort is discernible on the British scene. Again, the development and evaluation of techniques for the assessment of work behaviour, work skills and training needs has been the subject of numerous American studies, but British work in this area is sparse (Wilcock and Dixon, 1978; Whelan, 1977). The low correlation between initial performance and level attained after training makes predicting success in employment difficult. Indeed, Grant et al (1973), comparing ATC instructors' predictions of success and failure on specific tasks with disabled individuals' actual performance, found a high incidence of inaccurate prediction of failure. Thus, there is a need for research to analyse the skill requirements of jobs in order to make training more relevant, as well as for studies on more general questions relating to assessment.

Though there is widespread dissatisfaction with traditional diagnostic and assessment procedures, there is no general agreement on alternatives. There is, however, a growing rejection of assessment that is not directly related to remedial measures or intervention of some kind. As has been shown earlier, the notion of social context is crucial in the assessment of special needs, yet the entire diagnostic process as presently constituted tends to be carried out as if only one individual were involved. Assessment procedures yield descriptions of the status of the individual on a series of attributes which are determined by what is believed to be relevant. Explicit social consequences are only very rarely assessed, probably because of the problems of measurement that this would raise. There is therefore a distinct danger that attributes that are easily measured may come to be regarded as those that are most valuable to measure.

2 Staff training

Initial and in-service training for all personnel concerned with young people with special needs is in urgent need of improvement (CERI, 1979; Warnock, 1978). With the increased allegiance to the principle of integration, it becomes particularly important for teachers to be made more aware of the characteristics, abilities and aspirations of these young people. Teaching objectives and the methods used to reach them may often be in marked contrast to conventional classroom practice. While many of the issues involved are common to teachers in all sectors, perhaps the greatest problems are now being faced by those in the colleges of further education, where the trend towards integration is only now beginning to emerge on any significant scale.

During the past decade provision for young people with special educational needs in colleges of further and higher education has been steadily increasing. Many staff members are now likely to come into day-to-day contact with students with special needs. Yet, while further education for the handicapped features regularly on conference and short course programmes, there is still little input from this area into the more substantive initial teacher training courses or into post-training advanced programmes (Hutchinson, 1980). Panckhurst (1980) has argued that without effective programmes of pre-service training for all further education teachers, in-service training for recruits to special posts in further education, and full-time specialist courses, provision for these students is likely to remain fragmented, uneven in quality and lacking a sense of purpose.

The possible organisation and content of this training are complex issues. Specialist teachers are currently recruited to colleges from special education posts in schools, from other posts in further education or from ordinary school teaching posts; and the training needs of each of these groups are different. Those from special schools will need some form of induction into the further education sector and the characteristics of the 16 to 19 age group; those from further education will need to learn about young people with special needs; those from ordinary schools will need both (Dixon, 1979).

The Warnock Committee (1978) recommended that teachers with major responsibility for students with special educational needs should take a one-year full-time course, or its equivalent, leading to a recognised qualification on completion of which they would receive additional payment (para. 12.70). In recognition of the fact that *all* further education teachers would need to increase their awareness of the problems and potentialities of these students, Warnock also recommended the introduction of a special education element into all initial training courses, on the lines of that proposed for school teachers but orientated towards the needs of young people over 16 (para. 12.68). For teachers already in post it was further recommended that short part-time courses should be provided which cover the same ground as the special education element (para. 12.68), as well as short courses in particular aspects of the teaching of young people with special educational needs (para. 12.71). It was anticipated that longer courses would be provided by the establishments currently responsible for FE teacher training provision (para. 12.72), while short courses would most likely be held on a regional basis (para. 12.73). Panckhurst's (1980) study of provision for the handicapped within the further education sector has also indicated that staff development measures will be successful only to the extent that provision can be mounted locally. Certainly in the present financial situation it is to be hoped that national and regional provision will be complemented by a variety of local initiatives. Short courses to familiarise lecturers with students' special needs and to suggest teaching methods which would help to integrate them into general classes could often be organised on an in-house basis. Induction courses for new members of staff are one obvious vehicle for this type of training, though they would of course need to be supplemented by courses for more experienced teachers.

The development of teacher education in this area has received

strong support from NATFHE (1978). A great deal of research now needs to be carried out to evaluate existing courses and to assess the feasibility of proposals for new kinds of provision. Induction, initial training, conversion and post-experience training arrangements all raise a number of questions of both logistics and content which must be answered before the co-ordinated programme of staff development recommended in the Warnock Report can be achieved.

As part of the cross-national OECD project on 'The Education of the Handicapped Adolescent' a study is being mounted to investigate initial and in-service teacher training schemes in the United Kingdom, Germany and Denmark. The question of training staff for special schools has been examined in the OECD member countries (CERI, 1979). It is, however, recognised that very little is known about the current strategies for training ordinary teachers to prepare them for accepting pupils with special needs into their classes. The aim of a new OECD study will be to collect information within the framework of a comparative study approach on initial and in-service teacher training in the UK, Germany and Denmark, and to evaluate the effectiveness of existing practices in each of the three localities. In Britain current research in this area of teacher education is particularly concerned with the development and evaluation of techniques for use in teacher training programmes. An investigation of the use of video-tape programmes for the in-service training of special education teachers is being undertaken at York University; while the DES is sponsoring follow-up work to a recently completed study at Huddersfield Polytechnic on the development of techniques and programmes for training teachers of the severely subnormal.

It is exceptional for any substantial attention to be given in initial training courses to the interpersonal relationships and methods of teaching that are found to be most effective with the less academically able. The need for teachers to have an understanding of the working world beyond the educational system has also largely been ignored, though there is some evidence that this aspect is beginning to achieve recognition (IFAPLAN, 1980). The improvements in initial training recommended by Warnock should make some impact in these areas. However, when account is taken of the numbers actually entering teaching compared with the size of the total teaching force it becomes evident that major efforts must be made in assisting those already in post.

Conferences, short courses and workshops held after the publication of the Warnock recommendations to discuss their practical implications for schools and colleges have been found by teachers to be of value, particularly in establishing contact with others working within this field (Bradley et al, 1981). However, it has been suggested that in cases where these were organised for staff from all sectors of education they tended to be biased towards the school sector and many FE staff felt that they could benefit from more courses and conferences aimed specifically at strategies for providing for handicapped students in the colleges (Ibid). As a group, teachers with major responsibility for these students appear to be particularly dedicated to their work and willing to take advantage of all available development opportunities, even when this has meant giving up free time or vacation periods.

Until progress can be made towards implementing the various recommendations made in the Warnock Report, there are two relevant courses currently available: the City and Guilds of London Institute certificate course 'Teaching of the Handicapped in Further Education' (CGLI 731) and the Open University's 'The Handicapped Person in the Community' (P 853). A new course, 'Special Needs in Education' (E 241) is also due to be offered by the Open University in 1982 and may be expected to make a significant contribution to the area.

The City and Guilds 731 course was first introduced in the 1977-78 academic year as part of their advanced teacher training programme and has proved to be a major source of training for teachers wishing to extend their knowledge of students with special needs. Although no systematic evaluation of the course has been undertaken, it is evident that a number of difficulties have arisen owing to the highly diverse training experiences of the further education teaching force. Under City and Guilds regulations, practising full- or part-time teachers as well as training personnel in industry, commerce, public or social service would normally qualify for entry to the course. However, the generality of these requirements presents a problem in practical terms. Implicit in the design of 731 is the assumption that suitable applicants will already have received initial training and for this reason no particular level of teaching experience is allowed for on the course. It is assumed that certain critical areas, such as curriculum planning and teaching method will already have been covered, but for further education teachers this is often not the case, as Hutchinson (1980) has shown.

Lecturers with major responsibility for students with special needs are the most likely group to take the 731 course, but as yet few other college staff have shown any real interest (Bradley et al, 1981; Panckhurst, 1980). In fact it is often the case that the majority of course members come from outside agencies involved with handicapped people. While course organisers believe that other college staff could receive substantial benefit from attending – and places are frequently not taken up due to low demand – they feel that some incentives will be required to encourage them to attend (Bradley et al, 1981).

This reticence may be attributed to a number of factors. For example, as with work in the areas of Unified Vocational Preparation and the Youth Opportunities Programme, teaching handicapped students receives little status in terms of both salary and prestige, and for this reason teachers are often reluctant to become involved in any major way. A substantial commitment to these students therefore means equally substantial losses in more instrumental terms, as has been shown by a number of research studies (Jones and Gottfried, 1966; Bradley and Silverleaf, 1979; Sampson, 1971). In addition, the small numbers of these students as yet

taking non-specialised courses also discourages many staff from seeing special training as a necessity. Without such training it does, however, seem fair to conclude that teachers will soon find themselves overtaken by events. The reluctance and sometimes even fear expressed by staff who have limited contact with students with special needs is seen by many as the greatest obstacle to the successful integration of these students into the further education sector. In practical subjects lecturers often dismiss the possibility of having students in their classes because of fears for their safety, yet surely these could be overcome. It is anticipated that as contact increases teachers' fears will be allayed, but this in no way negates the need for a programme of systematic training.

Dissatisfaction with current arrangements for training teachers of the handicapped is widely reflected in the literature (Cave and Maddison, 1978). Williams (1975) has argued that a variety of new skills are required by further education teachers if they are to fulfil their responsibilities to these students, yet surprisingly little research has been carried out into the range of skills needed and how these differ from those used by the normal teacher. Only a tiny proportion of research has been directed towards teacher behaviour and functioning in the classroom, and much of this has been in the form of American studies focusing on specific aspects of teacher behaviour (Grant, 1972; Spanfer, 1972; Tardif, 1971).

Evidence of the importance of teacher expectations has frequently been found (Cope and Anderson, 1977; Rutter et al, 1970), but it is probably the case that far more complex interactions are involved in this question than early studies, such as that carried out by Rosenthal and Jacobsen (1977) would suggest. It has, for example, been found that teacher expectations not only affect, but are also affected by students' own educational aspirations and performance (West, 1974). Thus it may be concluded that much of what needs to be taught involves greater sophistication in human interactive processes (Fink et al, 1975; Mittler, 1972) and, moreover, in assessment procedures (Gulliford, 1974; Gunzburg, 1974; Keogh and Becker, 1973). The proposal put forward by the West Midlands Regional Curriculum Unit (1980) – that further education colleges should offer an educational consultancy service to ensure that students enter appropriate course elements relevant to their special needs – has important implications for increased assessment expertise. There is, however, a marked shortage of teachers trained in these areas.

Liaison with other professionals and with parents and the local community in general must also be seen as an important aspect of the teacher role. Indeed, Warnock (1978) recommended the development of courses of inter-professional training which would enable each profession to gain an insight into each other's particular contribution and pattern of working (para. 16.21 and 16.25). There is as yet no research evidence on which to draw for information on the feasibility and potential value of such courses. It must, however, be regarded as a possible issue for future consideration. The need for a multi-disciplinary team to support young people with special needs is essential both during their school careers and throughout the transition to further education and employment. It is, of course, imperative to achieve maximum co-operation among the members of such a team.

Whatever improvements are made in the areas of initial and in-service training it would be unrealistic to expect every teacher to be trained to the level of being able to provide unaided for every student with special educational needs in his or her class. The development of advisory and supporting services is therefore an important issue for current concern. Warnock suggested that these services should be organised on a regional basis and, indeed, the idea of regional centres designed to bring educational resources, offer in-service training courses, and disseminate proven educational practices to teachers has received widespread support. Much more support for teachers should be forthcoming from local advisers and the inspectorate, who should be able to offer guidance and refer teachers to courses being run in other parts of the region. As it is, there are few further education inspectors with the appropriate knowledge of special education and, similarly, few special education inspectors sufficiently familiar with the workings of the further education sector. There is, then, a need for research investigating the feasibility and effectiveness of different ways of structuring advisory and support services for teachers in this area.

The provision of such services – and indeed the establishment of the special education staff college proposed by Warnock (para. 18.18) – would of course require a significant input of resources. In the meantime there is, however, one recommendation which can be put into operation immediately with little or no financial implications: the designation of a member of staff in each college who will be responsible for handicapped students (para. 10.42) and will perform a dynamic staff development role in increasing his or her colleagues' knowledge and understanding of their special needs. Case studies describing and evaluating different ways in which this role is conceptualised and performed could provide valuable information to colleges where such a post has not yet been brought into effective operation.

In addition to issues related to teacher education, recommendations were made by Warnock concerning the initial and in-service training of careers officers, educational psychologists and social workers, all of whom are expected to perform important functions with regard to easing the transition to adult life for young people with special needs. In the case of social workers, for example, it was recommended that an element be included in their initial training to acquaint them not only with the social work aspects of different disabilities, but also with the special education services available to young people and their parents (para. 15.48). Research on the training needs of each of these professions and on the possible content and nature of training provision is now necessary as a basis for future planning.

3 Support services

Warnock (1978) suggested that a young person may well choose to go for advice or help on leaving school to someone with whom he or she has developed a special rapport, such as a teacher or social worker. There is, however, some evidence to suggest that such a rapport may not in fact have been established for a given individual. Rowe and Morgan (1976) found with a group of cerebrally palsied young people that in only a few cases did a relationship seem to have been created with a social worker which was of genuine value or support to the disabled person. Clearly, more research evidence is required to assess the prevalence of this situation with a much larger and more heterogeneous group. Rowe and Morgan themselves concluded that the co-ordination of medical and social care urgently requires further attention so that young people do not find themselves slipping through the bureaucratic net on leaving school. These researchers see this co-ordination function as a social rather than a medical responsibility, and suggest that social services departments should appoint trained and experienced social workers specifically to take responsibility for the co-ordination of services for young people with special needs.

Three current research investigations are concentrating on the needs of families with a handicapped member and the kinds of help they may require from the support services. One is being carried out at Bristol University under the sponsorship of the DHSS; the second, undertaken at the National Children's Bureau, is due to publish a report on the findings later this year. The third study is monitoring the use of a flat for families with mentally handicapped children. This work is being carried out by the Centre for the Mentally Handicapped with support from the King's Fund. The majority of large scale work in this area is supported by the DHSS who, in addition to the research cited above, are sponsoring an evaluation of support services for adults and children with epilepsy, and an appraisal of the mobile social service units with particular reference to mentally handicapped adults, as well as the major work in progress in the Sheffield area on the organisation and evaluation of services for the mentally handicapped of all ages.

The availability of support staff in colleges of further and higher education may be the critical factor determining whether individual students are able to take advantage of the increases in course provision. Panckhurst (1980) concluded that, while colleges had established good liaison with the disablement resettlement officers, they had only variable contact with social workers. He further found a distinct shortage of health and welfare and care staff within the colleges themselves. Further studies are needed to determine the best way of providing essential services. In cases where they might overlap, such as education welfare officers and social workers, research should be directed towards establishing a more rational system to ensure that young people do not slip through the bureaucratic net. A study currently being undertaken at Brunel University, under the sponsorship of the DES, is looking particularly at the role of education welfare and social work agencies in comprehensive schools, and should provide valuable evidence on existing patterns of care at the secondary school level.

Only one investigation in progress is concerned specifically with evaluating the services available to school leavers. This work is being carried out at the Invalid Children's Aid Association with support from the King's Fund, and is examining the experiences of physically handicapped school leavers and their access to services within a single local authority. Such a study might usefully be undertaken with a much larger population.

Tizard (1974) pointed to the many difficulties involved in organising community based services, particularly for the mentally handicapped, since no criteria of quality exist. Problems of evaluation are therefore extremely complex, but services are now changing and research effort should reflect this in providing a framework for future policy decisions.

4 Housing and access

The housing occupied by families with a handicapped member has frequently been found to be inadequate (Fox, 1971; Walker et al, 1971; Kew, 1973). The evidence is conflicting on whether these families actually live in houses that are substandard when compared with the general population, but it has been suggested that where a handicapping condition has a social class bias and where disposable income is reduced through caring for a handicapped child, this is in fact the case (Anderson and Spain, 1977). Evidence is conflicting, too, on the issue of whether the housing needs specific to families with a handicapped child are being met. Much of this conflict may, however, be attributed to the impossibility of generalising about different kinds of needs arising from different types of handicapping condition (Woodburn, 1973). Perhaps the most crucial element here is the degree of physical mobility of the individual (Jarvis, 1977), though many families whose houses require modifications do not ask for local authority assistance in carrying these out (Glendinning and Bradshaw, 1977).

Young people who do not live in the family home, and particularly those with severe disabilities, may require full residential care to meet their housing needs adequately. The Warnock Report (1978) recommended a graduated range of accommodation, with continual encouragement being given to individuals to move along this continuum in the direction of full independence (para. 10.111). Here more research is needed in order to identify the most successful methods of encouraging young people with special needs to live as independently as possible.

For many of these young people transport can present a significant difficulty in achieving independence. While the problem is perhaps most obvious for the physically disabled, research has shown that the use of public transport is seriously restricted by forms of behaviour disturbance (Crank and Kelly, 1976; Baldwin, 1977). The same kinds of problem apply in the case of physical access to educational institutions and places of work. Recent research

on the further education sector by Panckhurst (1980) found that colleges were generally physically accessible to handicapped students. It should however be noted that this study was particularly concerned with institutions which already have a firm commitment to meeting the special needs of such students. Overall it is, then important to undertake a large-scale monitoring of the implementation in educational institutions of the Chronically Sick and Disabled Persons Act 1970.

5 Disseminating information

Whether or not the individual is in possession of accurate and detailed information concerning his or her special needs can make an enormous difference to the process by which a coherent self-identity is produced (Voysey, 1975). Yet current channels for the dissemination of such information have often been found wanting. Parents have expressed dissatisfaction at not receiving as much information on their child's disability as they would like (Fox, 1975; Harrison, 1977; Goddard and Rubissow, 1977). Ignorance among children and adolescents with special needs (Collier and Etzwiler, 1971; Scott et al, 1975) and among their teachers (Cope and Anderson, 1977; Watson, 1972) has also been noted.

Supplying the necessary information can place a considerable strain on the existing resources of service agencies (Hewett, 1976), and there is some evidence to suggest that in the early 'seventies local authorities were reticent to publicise services in case they created a greater demand than they were able to meet (Social Policy Research, 1973). More recent work does, however, indicate that the social services provide the most important source of information on handicap, followed by schools, friends and relations, voluntary organisations, and the media (Bradshaw, 1978). The information required on the management of disability is a common research theme (Parfit, 1975; Richards and McIntosh, 1973), and it is generally agreed that a major role is played here by workshops and centres for the disabled. Advice is a central component of many of the units described by Pugh and Russell (1977), though it has been found that parents' groups (Attwood, 1977) are also an important source of information.

Concern has been expressed on other topics in relation to the dissemination of information. There is, for example, a bewildering variety of overlapping and competing allowances available to handicapped teenagers, but inadequate procedures to ensure that individuals are able to select the appropriate ones for their particular circumstances (Rowan, 1980). Although there is constant research and development on aids for handicapped people, this is another area where information on recent innovations which are available does not reach the very people who might be expected to benefit from them (Greaves and Massie, 1979). From the point of view of education, increased provision of courses to meet special needs must be matched by increased efforts to ensure that available opportunities are widely publicised. The Sheffield Handbook (Powell, 1978) has already offered a particularly useful description of available services for young people with special needs, while a guide for handicapped school leavers, on which work has recently been carried out by the Disabled Living Foundation with support from the King's Fund, may be expected to make another useful contribution to the dissemination of information.

There is a clear need for research in this area to identify the most effective means of disseminating information on a wide range of topics. And this, of course, does not only imply a concern with information of direct interest to those with special needs. Society in general is very ill-informed regarding the nature of disability and its consequences for disabled individuals. Research has frequently shown that stereotypes of specific disabilities continue to be held which bear little actual resemblance to reality (Hilbourne, 1973), and, as has already been shown, whether or not a disability becomes a handicap depends to a large extent on prevailing social attitudes.

6 Co-ordination and co-operation

It has been suggested here that the years from 14 to 19 encompass a number of transitional points each of which involves a critical process of decision-making. The need for co-ordination and co-operation in securing the best provision for young people approaching or experiencing transition is clear. Successful approaches at one level can have only limited or partial impact if they are not systematically followed up as part of an overall strategy. Aspects of co-ordination at a number of levels have been mentioned in the various sections of this report. For educational institutions co-ordination is necessary between the variety of measures designed to improve the process of preparing young people for adult life: curriculum development, organisation, teaching methods, guidance and counselling, assessment techniques and staff development.

From the point of view of career choice, the selection of appropriate further and higher educational opportunities, and the development of personal skills and competencies it is also vital to integrate what is done within educational institutions with what is happening in the wider society. This has implications not only for the curriculum but also in terms of establishing close liaison networks with employers, support services and the community at large.

All young people are likely to be involved either directly or indirectly with official agencies and support services concerned to facilitate their transition to adult life. Co-ordination between these agencies and services is essential in order to avoid any unnecessary overlap – or more importantly any gaps – in existing provision, and to ensure that young people and their parents are fully aware of the range of services on which they may draw and of their respective roles and responsibilities.

Further research is needed to assess the problems and possibilities of organising an overall co-ordinated approach to provision for young people with special needs, and to identify and evaluate the factors affecting the balance of the different components involved. Only within a framework provided by such detailed information can an effective and efficient pattern be achieved.

CHAPTER 5

Research Issues and Recommendations

A number of trends can be discerned in the studies that have been reviewed here. These will now be summarised briefly before discussion of specific research recommendations.

One of the more obvious characteristics of research in this area is that individual studies have tended to concentrate on particular handicapping conditions – spina bifida, hydrocephalus and cerebral palsy, blindness, deafness, epilepsy, etc – and to examine the needs of young people with these conditions rather than focusing on a broader cross-section of all young people with special needs.

Methodologically, many of the studies have been limited through being small-scale, lacking in theoretical awareness or being purely descriptive. The paucity of action research projects where they would be appropriate has been noted. In general, it has to be said that the research effort in this area would benefit from a considerable increase in research skills and level of awareness of research issues. Also, greater co-ordination of effort is required. Small-scale studies that are well designed and executed have an important place, but their usefulness can be greatly enhanced if they are set in a broader framework. The importance of a theoretical perspective is commonly ignored, even though this means that essential context is missing. It should be noted too that there is a great deal of theoretical background and research in other areas that would illuminate the situation of young people with special needs and improve the planning of provision for them.

A further methodoiogical constraint is that a good deal of the more substantial work has relied on retrospective designs. There are few prospective longitudinal studies on the lines of those currently being carried out by, for example, Tobin, Zangwill, and the National Child Development Study, in which the experiences and achievements of young people are examined as they progress from childhood to adulthood. Retrospective studies are usually confined to those who have remained in special status and neglect those for whom the intervention of special services has been highly effective. They cannot provide a totally accurate picture of the actual influence exerted at the various transitional points by significant others, including parents, relatives, neighbours and friends, and by the educational and support services.

A great deal of the work that has been undertaken on the needs of the disabled has been carried out in the school sector, and especially among younger children. Thus little information is available on the epidemiology of handicap in the 14-19 age range or on the coherence of pre- and post-sixteen curricula. Studies on the behaviours and characteristics leading to children being identified as having special needs far outweigh those designed to increase our understanding of the developmental consequences of special needs and of intervention strategies appropriate to older pupils. Similarly, research on the availability and efficacy of support services has tended to neglect the special requirements of school leavers and students attending colleges of further education. This in turn means that we have little information on the continuity of support that an individual might be expected to receive.

As was noted in the introduction to this report, a much greater research effort has taken place in the United States. However, since many of the issues involved here do not have the same implications in the British context, evidence obtained in American studies has limited validity here. Both large-scale national studies and case studies are now needed to shed light on topics specific to the position of the handicapped young person in British society.

Duckworth (1980) in his study of the classification and measurement of disablement observed that much of the research in the area is uncoordinated, that the presuppositions of studies superficially similar in approach often differ in ways that ensure contradictory results, and that researchers can be as idiosyncratic as others in their use of disability terminology. Apart from producing confusion on the research scene, this can also mean that the findings that are emerging are not presented in a way which might make them of use to those who could best take advantage of them.

Mittler (1975) has observed that 'provision for the handicapped has sometimes been more impressive for the buildings that have gone up than for the quality of what has gone on inside them', pointing for one explanation of this fact to the failure to implement knowledge that is already available. It has been found, for example, that teachers do not normally read the research literature and that they are, in any case, likely to reject suggested alterations to their traditional approach (Wiseman, 1972), feeling that their personal competence and experience are being called into question. Researchers for their part have often hesitated to draw action conclusions from their work (Ryan, 1973). They are however, becoming increasingly aware of the minimal impact of their investigations on practitioners and are recognising the necessity for new forms of partnership in which teachers would take a more active role. Because research frequently appears to them to be remote from the realities of the classroom, teachers are more likely to accept its findings when they have been actively involved in the design and

conduct of the research (Currie, 1973). Researchers, too, should extend their role and responsibilities to take an active part in the dissemination and application of their findings (Karnes, 1970). To date however, research in this area has given little specific consideration to innovative dissemination practices.

It is clear from the above that there is scope for a great variety of research studies to improve understanding and service delivery in this area. We note some of these below.

1 The target group
Two considerations stand out here: the nature and extent of the group; and the process of stereotyping.

It would seem a basic requirement to obtain a better estimate of the extent of special need in the age group than we possess at the moment. This would not necessarily take the form of an incidence study but might for example be done on a selective basis in association with efforts to validate the Warnock grid (or alternatives geared to the age group).

Stereotypes are prevalent in this age group, many of them mistaken and with demonstrable negative effect. A study of the process of stereotyping in relation to young people with special needs would examine how stereotypes are formed and transmitted, what effects follow from them in practice, and how simplistic notions of handicap might be replaced by more refined notions of functional limitations. Such a study could be conducted within an individual institution or it could be set more broadly in society to take account of the media and other determinants of public opinion. Though its focus would be theoretical, it could have major practical implications.

2 Organisation of provision
There are several strands to this:

i. An initial study might provide an overview of the variety of educational provision for different groups of students with special needs and examine the rationale for their diversity.

ii. A more specific study would look at the role of regional and national provision, especially in the further education sector. This receives additional importance in the light of growing trends toward self-sufficiency on the part of the LEAs and the reluctance to utilise out-county provision.

3 Special schools
There is need of a study that would examine how special schools can structure themselves in order to meet the needs of older pupils. There are curricular considerations of course, but there are major organisational factors as well that facilitate the growth into adulthood of those who must stay in special schools.

A second focus of enquiry is the boundary between the special school and further and higher education, employment and unemployment.

4 FE sector
Having established the range of provision, it would be useful to conduct detailed studies on a number of different forms of FE provision for special students. This would focus on structural factors, identifying the need for reorganisation and additional inputs, noting constraints and opportunities, and in general illuminating the process by which FE colleges can adapt and extend their provision to meet a wider range of special needs. Such a study would produce analytic case studies that would assist colleges in revising their provision.

5 The curriculum
It is clear that work on the curriculum must have high priority. This can be seen in terms of curriculum development, implementing the curriculum, and disseminating good practice.

i. *Curriculum development.* There is a balance to be found at two levels – ensuring special needs are met without further isolating students, and preparing them for the practicalities of work and adult living without unduly narrowing their educational experience and opportunities for personal development. At school the effort must be to plan the curriculum in a systematic way so that objectives are made explicit and deliberate provision is made for each area identified. A particular concern must be the development of leavers' courses that are integrated with the rest of the curriculum. At FE level many new courses must be developed or adaptations made to existing ones in order to cater adequately for young people with special needs. These courses need to be custom built to an extent in order to take account of students' needs, their wishes and aspirations, and local conditions. At both school and FE levels there will be specific curricular concerns relating to older pupils such as the possible need for social skills training.

ii. *Implementing the curriculum.* The teaching of young people with special needs can benefit from general developments in special education. Many of the pedagogical developments that have benefited young children such as precision teaching or the more widespread use of sign language have relevance to older pupils as well. There is a danger however, particularly when drawing on existing curriculum materials, that the young person's age and general level of development will be neglected. There is a dearth of literacy and other materials geared to the adolescent with low attainments, and research and development in this area must be given high priority.

Thought must also be given to the question of monitoring students' progress. This must be tackled as an integral part of curriculum planning and development of materials if teaching is to be systematic and effective.

The emergent possibilities in microelectronics would seem to offer especial promise here and the proposed work on microelectronics in special education should bear this in mind.

iii. *Dissemination.* The dissemination of good practice is important throughout special education, but especially so where the curriculum is concerned. Many curricular and pedagogical developments are local in origin and use. In order to capitalise on excellence where-

ver it arises and avoid wasteful duplication of effort, there is need to assemble and disseminate information on existing practice.

6 Attainment

There are various pieces of evidence to suggest that young people with special needs display an increase in intellectual efficiency during adolescence. The findings are tentative, leaving open for instance the possibility that the gains noted might be due in large measure to institutional factors (thus, leaving special school may expose a young person to better language models and hence result in improved language skills). In view of the enormous importance for educational provision that a positive finding would have, and in spite of the likely difficulty in establishing unambiguous findings, studies that would clarify this matter merit close attention. Such studies would be longitudinal in nature and would provide the opportunity to examine a number of factors relating to the organisation of educational provision for adolescents with special needs.

Longitudinal studies could usefully be supplemented by theoretical inquiries into the nature of cognitive development in adolescence. Special education has been able to borrow extensively from theories of child development. These have primary application to normal infants and children, and it must not be supposed without evidence that the development of retarded adolescents follows the same patterns only later on and more slowly. Hence, there is need for direct examination of cognitive functioning and other developmental processes in young persons with special needs.

7 Careers education

This must be part of the overall curriculum of course. Three aspects for research consideration may be noted:

i. Organisation – should careers education be provided separately or integrated into other areas of the curriculum? If the latter, how is this best organised?
ii. How to expand the content of careers education beyond merely giving information on factual matters.
iii. How to engage young people in an active way so that they understand and use information they receive, are able to seek out information on their own, and so on.

8 Careers guidance

The deficiencies in careers guidance for young people with special needs have perhaps been sufficiently documented to make further research enquiry unnecessary. Without a sizeable increase however in the number of specialist careers officers – an unlikely eventuality – the remedies are less clear-cut. Research effort could usefully focus on developing and examining alternative ways of providing careers guidance, paying particular attention perhaps to utilising local resources – parents, employers, community agencies.

A longitudinal study of the efficacy and relevance of careers guidance would be useful. It would be especially instructive to take account of the perspective of the recipients.

9 Work preparation

Work experience programmes have proliferated in schools, as part of leavers' courses or as entities in their own right. A study is necessary to assemble information on the range of practice, to analyse the role of such programmes and their relationship to the rest of the curriculum for school leavers, and to evaluate their relevance to the world of work.

Regardless of where work experience programmes are carried out, there are problems to investigate with regard to content and method. On content, there is need to find the appropriate balance between work experience, training in social skills, work in the basics of literacy and numeracy, and the acquisition of specific vocational skills. On method, one must look at the balance between experience and instruction, and whether instruction is best delivered in the classroom or at the workplace.

Related to this must be the development of assessment procedures that allow close matching of vocational preparation to students' individual needs, and of recording procedures that facilitate the monitoring of attainment and students' progression from one scheme to another.

10 Employment experience

Quite aside from the disabilities young people have and the nature of any training they have received, there are obvious factors within the workplace that can determine success or failure at a job. A study that focused on these factors, social and personal as well as job-related ones, would help young people in making the transition to stable employment.

11 Unemployment

Distasteful though it may be to acknowledge it, a sizeable proportion of young people with special needs have no prospect of paid employment when they leave school. This situation is likely to continue in the immediate and medium-term future. While this has implications for the school leavers' curriculum – rather more so perhaps than is always acknowledged – there is particular need of research input to examine what it means to face long-term unemployment. Young people with special needs are not unique in this respect of course and their situation must not be divorced from that of their peers, many of whom have little prospect of getting employment. There are distinctive features about their situation however that make 'living without work' especially significant for them. Such a study would have major implications for the organisation of educational and vocational preparation provision and for the various arrangements – voluntary work, sheltered workshops, and so on – made at adult stage.

12 Social and emotional development

A good deal is known about social and emotional development in adolescence and how disability can interact with it. Rather less is known about how to tackle the problems (isolation, distorted development and so on) that can ensue. This assumes particular importance with the growth in mainstreaming, as abnormal patterns of behaviour become more visible but also there are more opportunities for observing normal patterns of behaviour and

participating in 'normal' society. So, the research effort here should focus on intervention strategies: What can be done to further interaction between young people with special needs and their peers and to promote mutually acceptable patterns of relationships? An action research methodology might be useful here.

13 Assessment

Questions relating to assessment recur throughout consideration of provision for this group. Two areas in particular stand out: the diversity of assessment procedures at FE level; and the assessment of work behaviours and skills.

A great variety of assessment procedures are used in FE colleges, and there is evidence to suggest that the quality of assessment is uneven. There is clear need of an examination of practice, relating it to actual needs and facilities so that practical guidelines might be given to colleges.

In view of the evidence of poor success in predicting employment outcomes and matching training to needs, an analysis of the skill requirements of jobs would help in making training more specific. Assessment and training programmes could be related more directly to the behaviours and skills that will be required of the young person when he or she takes up employment.

14 Training

If the further education sector is to cater adequately for young persons with special needs there is considerable need of staff training. The training requirements are complex and varied, depending for example whether staff have been recruited from the special education sector, from ordinary schools or from other posts in further education. A coordinated programme of staff development would encompass elements of initial training, induction, conversion and post-experience training. A great deal of research is needed to evaluate existing courses, to assist in developing new arrangements and to evaluate training provision in a comprehensive way.

The City and Guilds course 'Teaching of the Handicapped in Further Education' (CGLI 731) is one major source of training for further education teachers who wish to extend their knowledge of students with special needs. A systematic evaluation of this course, examining take-up as well as content, would be most useful.

The Warnock recommendation (10.42) that every establishment of further education should designate a member of staff as responsible for the welfare of students with special needs in the college and for briefing other members of staff on their special needs lends itself to specific evaluation. Such a person could perform a dynamic staff development role in relation to special need. Case studies describing and evaluating different ways in which this role is conceptualised and performed could provide valuable information to colleges where such a post has not yet been brought into effective operation.

15 Support services

Given the multiplicity of services – educational, employment, health, social services – that impinge on young people with special needs, a study of the range of such services and how they work most effectively in the interest of young people would be of great value.

A related issue is the development of an advisory and support network. This is all the more necessary if young people with special needs are to be dispersed more widely within the education system and have more curricular options open to them. It will be necessary to devise new ways of structuring such services and evaluate their feasibility and effectiveness.

16 Disseminating information

There is a clear need for research to identify the most effective means of disseminating information on a wide range of topics to young persons with special needs. They include services available, allowances, communication and other aids, developments in microelectronics.

Bibliography

Anderson, E. M. (1973) THE DISABLED SCHOOLCHILD. London: Methuen.

Anderson, E. M. and Spain, B. (1977) THE CHILD WITH SPINA BIFIDA. London: Methuen.

Association for Spina Bifida and Hydrocephalus (1978) CHILDREN WITH SPINA BIFIDA AT SCHOOL. London: ASBAH.

Attwood, T. (1977) The Priory Parents' Workshop. CHILD: CARE, HEALTH AND DEVELOPMENT, 3, 81-91.

Bagley, C. (1975) Suicidal behaviour and suicidal ideation in adolescents. BRITISH JOURNAL OF GUIDANCE AND COUNSELLING, 3, 2.

Baldwin, S. (1977) DISABLED CHILDREN: COUNTING THE COSTS. London: The Disabled Alliance.

Baranyay, E. P. (1971) THE MENTALLY HANDICAPPED ADOLESCENT. Oxford: Pergamon.

Baranyay, E. (1976) A LIFETIME OF LEARNING. London: National Society for Mentally Handicapped Children.

Barnes, J. A. (1978) Preparation for Employment: A Model Programme for the Handicapped School Leaver. City of Salford Education Department.

Bazalgette, J. (1978) SCHOOL LIFE AND WORK LIFE. London: Hutchinson.

Bennett, P. (1978) Patchy provision for handicapped students. NATFHE JOURNAL, 7, 4.

Beresford, P. and Tuckwell, P. (1978) The scandal of adult training centres. COMMUNITY CARE, August 2.

Berscheid, E. and Walster, E. H. (1974) A little bit about love. In Huston, T.L. (Ed) FOUNDATIONS OF INTERPERSONAL ATTRACTION. New York: Academic Press.

Beveridge, M. et al (1979) Self-blame and communication failure in retarded adolescents. JOURNAL OF CHILD PSYCHOLOGY AND PSYCHIATRY AND ALLIED DISCIPLINES, 20, 2, 129-138.

Birenbaum, A. (1970) On managing a courtesy stigma. JOURNAL OF HEALTH AND SOCIAL BEHAVIOR, 2, 196-206.

Bleackley, R. (1974) (Ed) DESPITE DISABILITY: CAREER ACHIEVEMENT BY HANDICAPPED PEOPLE. Reading: Educational Explorers.

Bogdan, R. and Taylor, S. (1976) The judged, not the judges: an insider's view of mental retardation. AMERICAN PSYCHOLOGIST, 31, 47-52.

Bradley, J. and Silverleaf, J. (1979) MAKING THE GRADE: CAREERS IN FE TEACHING. Windsor: NFER Pub. Co.

Bradley, J., Chesson, R. and Silverleaf, J. (1981) STAFF DEVELOPMENT IN FURTHER EDUCATION. (In Press.)

Bradshaw, J. (1978) INCONTINENCE: A BURDEN FOR FAMILIES WITH HANDICAPPED CHILDREN. London: Disabled Living Foundation.

Brant, S. and Hansen, T. V. (1972) Young adults with cerebral palsy in Denmark: an investigation into some sexual problems. In Lancaster-Gaye, D. (Ed) PERSONAL RELATIONSHIPS, THE HANDICAPPED AND THE COMMUNITY. London: Routledge and Kegan Paul.

Brennan, W. K. (1979) CURRICULAR NEEDS OF SLOW LEARNERS. Schools Council Working Paper 63. London: Methuen.

Brimblecombe, F. S. W. (1977) The Honeylands Project. JOURNAL OF MATERNAL AND CHILD HEALTH, 2, 361-366.

Brimer, A. (1972) WIDE-SPAN READING TEST. London: Nelson.

Brindley, A. R. (1977)	The physically handicapped school leaver and further education. Unpublished M.Ed. Thesis, University of Birmingham.
Brolin, D. (1973)	Vocational evaluation: special education's responsibility. EDUCATION AND TRAINING OF THE MENTALLY RETARDED, 8, 1, 12-17.
Brolin, D. E. and D'Alonzo, B. J. (1979)	Critical issues in career education for handicapped students. EXCEPTIONAL CHILDREN, 45, 4, 246-253.
Brolin, D. and Kokaska, C. (1974)	Critical issues in job placement of the educable mentally retarded. REHABILITATION LITERATURE, 35, 6, 174-177.
Brown, G. W. and Harris, T. (1978)	SOCIAL ORIGINS OF DEPRESSION: A STUDY OF PSYCHIATRIC DISORDER IN WOMEN. London: Tavistock Publications.
Browne, G. (1977)	ADJUSTMENT TO INDUSTRY FOR THE LESS ABLE SCHOOL LEAVER: THE BRIDGEND PROJECT. Manchester: National Elfrida Rathbone Society.
Browne, G. (1981)	The Factory in our Blackboard. YOUTH IN SOCIETY, February, 18-20.
Brummer, E. R. (1974)	The effects of a paid work experience on the measured vocational needs and interests of mentally retarded adolescents. DISSERTATION ABSTRACTS INTERNATIONAL, 35(4A), 1972-1973.
Bruner, J. S. (1974)	BEYOND THE INFORMATION GIVEN. London: Allen and Unwin.
Burgess, R. (1977)	A preparatory course for the physically handicapped. EDUCARE, 1, 4, 6-8.
Burton, L. (1975)	THE FAMILY LIFE OF SICK CHILDREN. London: Routledge and Kegan Paul.
Butler, N. R. and Alberman, E. D. (1969)	PERINATAL PROBLEMS. London: Livingstone.
Campaign for the Mentally Handicapped (1972)	FUTURE SERVICES FOR THE MENTALLY HANDICAPPED: A MANIFESTO. London: CMH.
Campaign for the Mentally Handicapped (1977)	NO LONGER A CHILD. Bristol: CMH pamphlet.
Campbell, J. P. (1977)	Report on a survey of facilities for disabled students at Newcastle upon Tyne Polytechnic (mimeo).
Canter, H. and Barnitt, R. (1978)	Research on physical handicap and residential provisions. Unpublished.
Carnley, N. (1977)	Differences between American and European Workshops: implications for training. VOCATIONAL EVALUATION AND WORK ADJUSTMENT BULLETIN, 10, 4, 23-30.
Carter, M. P. (1962)	HOME, SCHOOL AND WORK. Oxford: Pergamon Press.
Carver, V. and Rodda, M. (1978)	DISABILITY AND THE ENVIRONMENT. London: Paul Elek.
Cave, C. and Maddison, P. (1978)	A SURVEY OF RECENT RESEARCH IN SPECIAL EDUCATION. Windsor: NFER Pub. Co.
Cegelka, W. J. (1970)	A review of the development of work study programmes for the mentally retarded. TRAINING SCHOOL BULLETIN 67, 2, 87-118.
CERI (1979)	Education of the Handicapped Adolescent: Report on the results of the first phase. CERI/CD (79) 13.
Council for Educational Technology (1981)	MICROELECTRONICS AND CHILDREN WITH SPECIAL EDUCATIONAL NEEDS: A REPORT AND PROPOSAL. London: CET.
Clark, D. F. (1960)	Visual feedback in the social learning of the subnormal. JOURNAL MENTALLY SUBNORMAL IV, 30-39.
Clarke, A. M. and Clarke, A. D. B. (1974)	MENTAL DEFICIENCY: THE CHANGING OUTLOOK. London: Methuen.
Cochrane, P. B. and Marini, B. (1977).	Mainstreaming exceptional children: the counsellor's role. SCHOOL COUNSELOR, 25, 17-22.
Coe, D. (1978)	Opportunities for handicapped students in post-school education. ACFHE.
Collier, B. N. and Etzwiler, D. D. (1971)	Comparative study of diabetics' knowledge among juvenile diabetics and their parents. DIABETES, 20, 51-57.

Collins, J. K. and Thomas, N. T. (1972) Age and susceptibility to same-sex peer pressure. BRITISH JOURNAL OF EDUCATIONAL PSYCHOLOGY, 42, 83-5.

Conrad, R. (1979) THE DEAF SCHOOL CHILD: LANGUAGE AND COGNITIVE FUNCTION. London: Harper and Row.

Cope, C. and Anderson, E. (1977) SPECIAL UNITS IN ORDINARY SCHOOLS: AN EXPLORATORY STUDY OF SPECIAL PROVISION FOR DISABLED CHILDREN. University of London Institute of Education.

Corner, R. J. and Puliavan, J. A. (1972) The effect of physical deviance upon face to face interaction: the other side. JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY, 23, 33-9.

Crank, A. and Kelly, P. (1976) Seven Points for action. HEALTH AND SOCIAL SERVICES JOURNAL, 86; 12-13.

Cull, A. M. (1974) A study of the psychological concomitants of a chronic illness in childhood. Ph.D. thesis, University of Edinburgh.

Cunliffe, W. (1976) Vocational assessment of non-academic blind adolescents. NEW BEACON, 49, 705, 1-8.

Currie, J. M. (1973) Some new teachers' views. In Clarke and Clarke, pp. 95-100.

Davie, R. (1975) Children and families with special needs. Inaugural lecture as Professor of Ed. Psych., University College, Cardiff.

Davie, R., Butler, N. R. and Goldstein, M. (1972) BIRTH TO SEVEN. London: Longman.

Davis, R. E. (1975) Family of physically disabled child: family reactions and deductive reasoning. NEW YORK STATE JOURNAL OF MEDICINE, 75, 1039-1041.

De La Cruz, F. F. and La Veck, G. D. (1973) HUMAN SEXUALITY AND THE MENTALLY RETARDED. New York: Brunner-Mazel.

Deno, E. (1970) Special education as developmental capital, EXCEPTIONAL CHILDREN, 37, 3, 229-237.

Department of Education and Science (1973) CAREERS EDUCATION IN SECONDARY SCHOOLS. London: HMSO.

Department of Employment (1972) RESETTLEMENT POLICY AND SERVICES FOR DISABLED PEOPLE. London: HMSO.

Dick, H. F. (1973) The effects of attending a segregated vocational education program as compared to an integrated vocational education program upon self-concept and attitude toward school of educable mental retardates. DISSERTATION ABSTRACTS INTERNATIONAL 34(6A) 3187.

Dixon, J. K. (1977) Coping with prejudice: attitudes of handicapped persons towards the handicapped. JOURNAL OF CHRONIC DISEASES, 30, 307-322.

Dixon, K. and Hutchinson, D. (1979) (Eds) Further Education of Handicapped Students. Bolton College of Education (Technical).

Domino, G. and McGarty, M. (1972) Personal and work adjustment of young retarded women. AMER. J. MENT. DEFIC., 77, 313-321.

Dorner, S. (1977) Sexual interest and activity in adolescents with spina bifida. JOURNAL OF CHILD PSYCHOLOGY AND PSYCHIATRY, 18, 229-237.

Drugo, J. and Cohen, C. (1977) Utilization of the R-FVH with an EMR population. MENTAL RETARDATION 15, 3, 46-7.

Duck, S. W. and Spencer, C. P. (1972) Personal constructs and friendship formation. JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY, 23, 1, 40-5.

Duckworth, D. (1980) THE CLASSIFICATION AND MEASUREMENT OF DISABLEMENT. Health Services Research Unit: University of Kent at Canterbury.

Early, D. F. (1973) Sheltered groups in open industry. LANCET, 1, 1370-1373.

Elliot, J. and Whelan, E. (Eds) (1975) EMPLOYMENT OF MENTALLY HANDICAPPED PEOPLE: A REPORT OF THE PROCEEDINGS OF A 2-DAY WORKSHOP HELD AT THE KING'S FUND CENTRE. Mental Handicap Paper No 8. London: King's Fund Centre.

Employment Services Agency (1976) EMPLOYING SOMEONE WHO IS MENTALLY HANDICAPPED. ELP 44, London: ESA.

Engel, J. and Foster, R. (1977) Getting the priorities right. TES, 11, March.

Esser, T. J. (1975) The workshop environment: some essential considerations. VOCATION ADJUSTMENT AND WORK ADJUSTMENT BULLETIN, March, 31-35.

Feldman, R. A. (1974) An experimental study of conforming behaviour as a small group phenomenon. SMALL GROUP BEHAVIOUR 5, November, 402-426.

Ferguson, J. H. (1976) The physically handicapped. The need for continued education. Survey conducted for the Manchester Education Committee (mimeo).

Ferguson, T. and Kerr, A. (1960) HANDICAPPED YOUTH. London: Oxford University Press.

Fester, A. R. and Gambra, L. M. (1972) Language indices of vocational success in mentally retarded adults. AMER. J. MENT. DEFIC. 77, 332-7.

Feuerstein, R. (1980) INSTRUMENTAL ENRICHMENT: AN INTERVENTION PROGRAM FOR COGNITIVE MODIFIABILITY. Baltimore: University Park Press.

Fink, A. H., Glass, R. M. and Guskin, S. L. (1975) An analysis of teacher education programs in behaviour disorder. EXCEPTIONAL CHILDREN 42, 1, 47-8.

Firth, G. C. (1974) TRAINING FACILITIES AND EMPLOYMENT OPPORTUNITIES FOR DEAF SCHOOL LEAVERS. Report of a Working Party. Carlisle: The British Deaf Association.

Fleming, I. (1978) Mentally handicapped school leavers: their assessment and placement. APEX, 6, 1, 23-6.

Fogelman, K. (1976) BRITAIN'S SIXTEEN-YEAR-OLDS. London: NCB.

Follwell, S. N. (1943) An enquiry into the use of speech in after school life. University of Manchester, unpublished thesis.

Fox, A. M. (1971) Handicapped children: the needs of their families and individual attitudes to services provided. Dissertation for Certificate in Development Paediatrics, Wolfson Centre, University of London.

Fox, A. M. (1975) Families with handicapped children: a challenge to the caring professions. COMMUNITY HEALTH, 6, 217-223.

Fox, A. M. (1977) Psychological problems of physically handicapped children. BRITISH JOURNAL OF HOSPITAL MEDICINE, 17, 479-490.

Freeman, R. (1970) Psychiatric problems in adolescents with cerebral palsy. DEVELOPMENTAL MEDICINE AND CHILD NEUROLOGY, 12, 64-70.

Fulthorpe, E. (1974) Spina bifida: some psychological aspects. SPECIAL EDUCATION: FORWARD TRENDS, 1, 17-20.

Further Education Curriculum Review and Development Unit (1978) EXPERIENCE, REFLECTION, LEARNING. London: FEU.

Further Education Curriculum Review and Development Unit (1979) A BASIS FOR CHOICE: REPORT OF A STUDY GROUP ON POST-16 PRE-EMPLOYMENT COURSES. London: FEU.

Further Education Curriculum Review and Development Unit (1981) VOCATIONAL PREPARATION. London: FEU.

Gallagher, J. J. (1972) The special education contract for mildly handicapped children. EXCEPTIONAL CHILDREN, 38, 527-535.

Gardner, D. C. and Beatty, G. J. (1950) Locus of control change techniques: important variables in work training. EDUCATION, 100, 3, 237-242.

Garnett College (1978) POST-16 ONE-YEAR PRE-EMPLOYMENT COURSES. London: FEU.

Garrad, J. and Bennett, A. E. (1971) A validated interview schedule for use in population surveys of chronic disease and disability. BRITISH JOURNAL OF PREVENTIVE AND SOCIAL MEDICINE, 25, 97-104.

Gilleard, C. V. (1976) Employment opportunities for the partially sighted school leaver. TEACHER OF THE BLIND, 65, 1, 49-55.

Glendinning, C. and Bradshaw, J. (1977) Housing handicapped children and their families. Social Policy Research Unit. University of York.

Goddard, J. and Rubissow, J. (1977) Meeting the needs of handicapped children and their families: the evolution of Honeylands. CHILD: CARE, HEALTH AND DEVELOPMENT, 3, 261-273.

Goffman. E. (1963) STIGMA. Englewood Cliffs, New Jersey: Prentice-Hall.

Gold, M. W. (1973) Research on the vocational habilitation of the retarded: the present, the future. In N. R. Ellis (Ed) INTERNATIONAL REVIEW OF RESEARCH IN MENTAL RETARDATION, Vol. 6, New York: Academic Press.

Goldberg, J., Katz, S. and Yekutiel, E. (1973) The effects of token reinforcement on the productivity of mentally retarded clients in a sheltered workshop. BRITISH JOURNAL OF MENTAL SUBNORMALITY, 19, 37, 2, 80-84.

Goldberg, R. J. (1974) Adjustment of children with invisible and visible handicaps: congenital heart disease and facial burns. JOURNAL OF COUNSELLING PSYCH.

Goodman, H., Gottlieb, J. and Harrison, R. H. (1972) School acceptance of EMRs integrated into a nongraded elementary school. AMER. J. MENT. DEFIC. 75, 412-417.

Goodwin, A. V. (1977) Trait treatment interaction in a vocational concept learning task for disadvantaged students. DISSERTATION ABSTRACTS INTERNATIONAL, 38(4A) 2079.

Goodyear, D. L. and Stude, E. W. (1975) Work performance: a comparison of severely disabled and non-disabled employees. JOURNAL OF APPLIED REHABILITATION COUNSELLING, 6, 4, 210-216.

Gorelick, M. C. (1967) Success and failures of the mentally retarded in a prevocational program. In G. E. Ayers (Ed) NEW DIRECTIONS IN HABILITATING THE MENTALLY RETARDED. Elwyn PA: Elwyn Institute.

Gottlieb, J. and Budoff, M. (1973) Social acceptability of retarded children in nongraded schools differing in architecture. AMER. J. MENT. DEFIC. 78, 15-19.

Grant, B. M. (1972) Teacher non-verbal activity. Paper presented to the Annual Meeting of the AERA, Chicago.

Grant, G. W., Moore, B. and Whelan, E. (1973) Assessing the work needs and work performance of mentally handicapped adults. BRITISH JOURNAL OF MENTAL SUBNORMALITY. 19, 37, 2, 71-79.

Greaves, M. and Massie, B. (1979) WORK AND DISABILITY 1977. London: The Disabled Living Foundation.

Gregory, S. (1976) THE DEAF CHILD AND HIS FAMILY. London: George Allen and Unwin.

Gulliford, R. (1971) SPECIAL EDUCATIONAL NEEDS. London: Routledge and Kegan Paul.

Gulliford, R. (1974) The content of Education for the mildly mentally retarded. In Tizard, J. (Ed) MENTAL RETARDATION: CONCEPTS OF EDUCATION AND RESEARCH, 93-102, London: Butterworth.

Gulliford, R. (1977) Vocational training and further education for ESN. RATHBONE NEWS, January, 1-2.

Gunn, A. D. G. (1976) Problems of disabled students. BRITISH MEDICAL JOURNAL, 2, 1498-9.

Gunn, A. D. G. (1977) University education for the physically handicapped. JOURNAL OF THE ROYAL COLLEGE OF GENERAL PRACTITIONERS. 27, 161-166.

Gunzberg, M. C. (1968) SOCIAL COMPETENCE AND MENTAL HANDICAP. London: Baillière, Tindall and Cassell. See Baranyay (1971).

Gunzburg, H. C. (1974) Further education for the mentally handicapped. In Clarke and Clarke, pp. 669-707.

Halperin, H. J. (1973) The hiring and employment of the handicapped and his rehabilitation. MARYLAND STATE MEDICAL JOURNAL, 22, 87-92.

Halpern, A. S. (1977) Testing social and prevocational awareness of retarded adolescents. In Mittler, P. (Ed) RESEARCH TO PRACTICE IN MENTAL RETARDATION: EDUCATION AND TRAINING, Vol. 2. London: University Park Press.

Halpern, A. S. (1979) Adolescents and young adults. EXCEPTIONAL CHILDREN, 45, 7, 518-523.

Halpern, A. et al (1975) THE SOCIAL AND PREVOCATIONAL INFORMATION BATTERY. Monterey, California: CTB/McGraw Hill.

Hanson, A. (1976) READY TO LEAVE. London: Collins.

Hardy, W. G. and Bordley, J. E. (1973) Problems in diagnosis and management of the multiple handicapped deaf child. ARCH. OTOLARYNG. 98, 4, 269-274.

Hargreaves, D. (1967) SOCIAL RELATIONS IN THE SECONDARY SCHOOL. London: Routledge and Kegan Paul.

Harris, A. I. (1971) HANDICAPPED AND IMPAIRED IN GREAT BRITAIN, PART 1. London: HMSO.

Harrison, S. P. (1977) FAMILIES IN STRESS. London: Royal College of Nursing.

Hayes, J. and Hopson, B. (1971) CAREERS GUIDANCE: THE ROLE OF THE SCHOOL IN VOCATIONAL DEVELOPMENT. London: Heinemann.

Hearns, C. B. and Seeman, J. (1971) Personality Integration and Perception of Interpersonal Relationships. JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY. 18, 1, 138-143.

Hegarty, S. and Pocklington, K. (1981) EDUCATING PUPILS WITH SPECIAL NEEDS IN ORDINARY SCHOOLS. (In Press.)

Hegarty, S., Pocklington, K. and Bradley, J. (1981) RECENT CURRICULUM DEVELOPMENT IN SPECIAL SCHOOLS. Report to Schools Council.

Hewett, S. (1970) THE FAMILY AND THE HANDICAPPED CHILD. London: George Allen and Unwin.

Hilbourne, J. (1973) On disabling the normal. BRITISH JOURNAL OF SOCIAL WORK, 3, 497-507.

Hill, J. M. M. (1976) A PRELIMINARY EVALUATION OF METHODS ADOPTED AT ILFIELD SCHOOL. London: Tavistock Institute of Human Relations.

Hill, J. M. M. (1976) REPORT ON LEAVERS' PROGRAMMES IN ESN SCHOOLS. London: Tavistock Institute of Human Relations.

Huber, C. H. (1979) Career planning with mildly retarded students: A model for school counselors. VOCATIONAL GUIDANCE QUARTERLY, 27, 3, 223-229.

Hull, M. E. (1977) The effects of selected presentation variables on the formation of vocational concepts by educable mentally retarded students. DISSERTATION ABSTRACTS INTERNATIONAL, 37(8A) 5079.

Hutchinson, D. (1980) The Teaching of the Handicapped in Further Education: CGLI course 731. In West Midlands Advisory Council for Further Education. EXTENDED ROLES OF COLLEGES OF FURTHER EDUCATION. WMACFE (mimeo).

IFAPLAN (1980) FROM EDUCATION TO WORKING LIFE. Interim report of the programme of pilot projects. Commission of the European Communities Directorate General for Research Science and Education.

Jackson, R. (1976) Are school leavers on the right track? NEW PSYCHIATRY, 3, 12-14.

Jarvis, S. N. (1977) Studies of children using wheelchairs. Report to National Fund for Research into Crippling Diseases.

Jarvis, S. N. (1978) The handicaps and ergonomics of children who use wheelchairs. DM thesis, University of London.

Jerrold, M. A. and Fox, R. (1979) The ESN school leaver. EDUCATION AND TRAINING, 13, 192-198.

Jones, E. (1978) Disabled School leavers in Wales Project. Bridgend College of Technology (mimeo).

Jones, R. L. (1971) PROBLEMS AND ISSUES IN THE EDUCATION OF EXCEPTIONAL CHILDREN. Boston: Houghton Mifflin.

Jones, R. L. and Gottfried, N. W. (1966) The prestige of special education teaching. EXCEPTIONAL CHILDREN, 32, 465-8.

Jowett, S. (1981) Personal Communication.

Karnes, M. B. (1970) The slow learner: what are his characteristics and needs? TODAY'S EDUCATION, 59, 3, 42-4.

Keogh, B. K. and Becker, L. D. (1973) Early detection of learning problems: questions, cautions and guidelines. EXCEPTIONAL CHILDREN, 40, 1, 5-11.

Kettle, M. (1979). DISABLED PEOPLE AND THEIR EMPLOYMENT: A REVIEW OF RESEARCH INTO THE PERFORMANCE OF DISABLED PEOPLE AT WORK. London: Association of Disabled Professionals.

Kew, S. (1975) HANDICAP AND FAMILY CRISIS. London: Pitman.

Kirton, M., Miller, K. M., Miller, M. and Shaw, F. E. (1976) CAREER KNOWLEDGE OF SIXTH FORM BOYS. London: Careers and Occupational Information Centre.

Kleck, R. E. and Rubenstein, C. (1975) Physical attractiveness, perceived attitude similarity, and interpersonal attraction in an opposite sex encounter. JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY, 31, 1, 107-114.

Klein, M. and Stern, L. (1971) Low birthweight and the battered child syndrome. AMERICAN JOURNAL OF DISEASES OF CHILDREN, 122, 15-18.

Knight, O. B. (1972) Occupational aspirations of the educable mentally retarded. TRAINING SCHOOL BULLETIN, 69, 54-7.

Kolstoe, O. P. (1972) Programs for the mildly retarded: A reply to critics. EXCEPTIONAL CHILDREN, 39, 51-5.

Kushlick, A. and Blunden, R. (1974) The epidemiology of mental subnormality in Clarke and Clarke, pp. 31-81.

Lambert, L. (1978) Careers advice and choosing a job. BRITISH JOURNAL OF GUIDANCE AND COUNSELLING, 6, 2.

Leeming, K., et al (1979) TEACHING LANGUAGE AND COMMUNICATION TO THE MENTALLY HANDICAPPED. London: Methuen.

Levinger, G. and Snoek, J. D. (1972) ATTRACTION IN RELATIONSHIP: A NEW LOOK AT INTERPERSONAL ATTRACTION. Morristown, New Jersey: General Learning Press.

Lofquist, L. H. and Davis, R. V. (1975) Vocational needs, work reinforcers, and job satisfaction. VOCATIONAL GUIDANCE QUARTERLY, 24, 132-140.

Loring, J. (1974) (Ed) The closed door: a report on the handicapped adolescent, his education and further education, and the problems he encounters. Spastics Society.

Lowe, P. B. (1979) Provision of further and higher education for the severely physically handicapped. Paper presented to Spastics Society Conference, Oxford (mimeo).

MacIntyre, I. (1976) Epilepsy and employment. COMMUNITY HEALTH, 7, 195-204.

Maizels, J. (1970) ADOLESCENT NEEDS AND THE TRANSITION FROM SCHOOL TO WORK. London: Athlone Press.

Majumder, R. K. (1973) Role of occupational orientation and on-the-job experience for the vocational development of disadvantaged youth. Proceedings of the 81st Annual Convention of the American Psychological Association, Montreal, 8, 791-2.

Manpower Services Commission (1977) YOUNG PEOPLE AND WORK. Report on the feasibility of a new programme of opportunities for unemployed young people. London: HMSO.

Manpower Services Commission (1978) YOUNG PEOPLE AND WORK. London: HMSO.

Manpower Services Commission (1979) SPECIAL PROGRAMMES, SPECIAL NEEDS: THE EDUCATIONALLY DISADVANTAGED AND THE MSC SPECIAL PROGRAMMES FOR THE UNEMPLOYED – A PRACTICAL GUIDE. London: MSC.

Marshall, A. (1967) THE ABILITIES AND ATTAINMENTS OF CHILDREN LEAVING JUNIOR TRAINING CENTRES. London: National Association of Mental Health.

Martin, E. (1970) A new outlook for education of handicapped children. AMERICAN EDUCATION, 6, 3, 7-10.

Maslow, A. H. (1954) MOTIVATION AND PERSONALITY. New York: Harper and Row.

Matson, J. L. and Martin, J. E. (1979) A social learning approach to vocational training of the severely retarded. JOURNAL OF MENTAL DEFICIENCY RESEARCH, 23, 1, 9-16.

Mattisson, A. (1972) The chronically ill child: a challenge to family adaption. MEDICAL COLLEGE OF VIRGINIA QUARTERLY, 8, 171-175.

Mattisson, A. and Agle, D. P. (1972) 1 Group Therapy with parents of hemophiliacs. JOURNAL OF THE AMERICAN ACADEMY OF CHILD PSYCHIATRY, 11, 558-571.

Maynard, P. E. and Hansen, J. C. (1970) Vocational maturity among inner city youths. JOURNAL OF COUNSELLING PSYCHOLOGY, 17, 15, 400-4.

Menghius, J. F. (1975)	Recruiting the services of the private placement agency. In Elliott, J. and Whelan, E. (Eds) EMPLOYMENT OF MENTALLY HANDICAPPED PEOPLE. London: King's Fund Centre.
Milofsky, C. D. (1974)	Why special education isn't special. HARVARD EDUCATIONAL REVIEW, 44, 4, 437-458.
Minde, K. K., et al (1972)	How they grow up: 41 physically handicapped children and their families. AMERICAN JOURNAL OF PSYCHIATRY, 128, 1554-1560.
Mittler, P. J. (1972)	Language and Communication, In Clarke and Clarke, 1974, pp. 527-591.
Mittler, P. J. (1975)	Research to practice in the field of handicap. 1st Public Lecture, Institute for Research Ment. Mult. Hcp.
Mittler, P. (1979)	PEOPLE NOT PATIENTS: PROBLEMS AND POLICIES IN MENTAL HANDICAP. London: Methuen.
Mittler, P. and Gittins, S. G. (Eds) (1974)	EDUCATION OF MENTALLY HANDICAPPED ADULTS. Manchester: National Society for Handicapped Children.
Mittler, P. and Preddy, D. (1981)	Mentally handicapped pupils and school leavers: a survey in North West England. In Cooper, B. (Ed) ABILITIES AND NEEDS OF MENTALLY RETARDED CHILDREN. (In Press.)
Mohr, D. (1977)	RESEARCH MONOGRAPH ON ADULT EDUCATION AND THE PHYSICALLY HANDICAPPED PERSON. London: Disabled Living Foundation.
Morgan, M. R. (1972)	Attitudes towards the sexuality of handicapped boys and girls. SPECIAL EDUCATION: FORWARD TRENDS, 16, 62-6.
Morley, K. G. and Appell, J. (1974)	An appraisal of the social progress of 59 mentally handicapped persons in community centres. In Gunzburg, H. C. (Ed) EXPERIMENTS IN THE REHABILITATION OF THE MENTALLY HANDICAPPED. London: Butterworths.
Moroney, R. M. (1976)	THE FAMILY AND THE STATE: CONSIDERATIONS FOR SOCIAL POLICY. London: Longman.
Murray, A. D. (1976)	Sheltered employment: the need for a national strategy. RESIDENTIAL SOCIAL WORK, 16, 4-6.
McMichael, J. F. (1971)	HANDICAP: A STUDY OF PHYSICALLY HANDICAPPED CHILDREN AND THEIR FAMILIES. London: Staples Press.
Nagi, S. Z., McBroom, W. H. and Cohette, J. (1972)	Work, employment and the disabled. AMERICAN JOURNAL OF ECONOMICS AND SOCIOLOGY, 31, 21-34.
NATFHE (1978)	COLLEGE PROVISION FOR HANDICAPPED STUDENTS: REPORT OF A SURVEY. London: NATFHE (mimeo).
National Bureau for Handicapped Students (1978)	AN EDUCATIONAL POLICY FOR HANDICAPPED CHILDREN. London: NBHS.
National Council for Special Eduction (1973)	REPORT OF THE WORKING PARTY ON HANDICAPPED SCHOOL LEAVERS. NCSE (mimeo).
National Development Group for the Mentally Handicapped (1977)	HELPING MENTALLY HANDICAPPED SCHOOL LEAVERS. Pamphlet No. 3. London: NDGMH.
National Innovations Centre (1974)	DISABLED STUDENTS IN HIGHER EDUCATION. London: NIC.
National Youth Employment Council (1974)	UNQUALIFIED, UNTRAINED AND UNEMPLOYED. Report of a Working Party. London: HMSO.
Nesbitt, M. (1977)	The final year in the special school. In Kedney, R. J. and Whelan, E. (Eds) THE EDUCATION OF MENTALLY HANDICAPPED YOUNG ADULTS. Bolton: Bolton College of Education (Technical).
Nicholls, A, (1977)	A TRANSFER PROCEDURE FROM SCHOOL TO POST SCHOOL PROVISION. Association of Professions for the Mentally Handicapped, papers from the fourth annual congress. London: APMH.
Panckhurst, J. (1980)	FOCUS ON PHYSICAL HANDICAP. Windsor: NFER Pub. Co.

Panckhurst, J. and McAllister, A. G. (1980) AN APPROACH TO THE FURTHER EDUCATION OF THE PHYSICALLY HANDICAPPED. Windsor: NFER Pub. Co.

Parfit, J. (1975) Siblings of handicapped children. SPECIAL EDUCATION: FORWARD TRENDS, 2, 19-21.

Parnicky, J. R. and Presnall, D. M. (1976) Interest inventories and the retarded. REHABILITATION COUNSELLING BULLETIN, 20, 2, 118-128.

Pflanz, M. (1976) Sociology in community medicine. In Ackeson, R. M. and Aird, L. (Eds) SEMINARS IN COMMUNITY MEDICINE, VOL. 1, SOCIOLOGY, 3-14. London: Oxford University Press.

Philp, M. (1978) Physically Handicapped Children and their Families, DHSS, unpublished.

Pilling, D. (1972) THE ORTHOPAEDICALLY HANDICAPPED CHILD. Slough: NFER Pub. Co.

Pilling, D. (1973) THE HANDICAPPED CHILD. London: Longmans.

Pilling, D. (1975) THE CHILD WITH ASTHMA: SOCIAL, EMOTIONAL AND EDUCATIONAL ADJUSTMENT – AN ANNOTATED BIBLIOGRAPHY. Slough: NFER Pub. Co.

Powell, R. (1978) YOUNG PEOPLE WITH SPECIAL NEEDS: THE SHEFFIELD HANDBOOK.

Powles, J. (1973) On the limitations of modern medicine. SCIENCE, MEDICINE AND MAN, 1, 1, 1-30.

Pritchard, D. (1963) EDUCATION AND THE HANDICAPPED. London: Routledge and Kegan Paul.

Pugh, G. and Russell, P. (1977) SHARED CARE: SUPPORT SERVICES FOR FAMILIES WITH HANDICAPPED CHILDREN. London: National Children's Bureau.

Puglia, R. J. (1976) Two approaches to facilitating career development among eighth grade disadvantaged youth. DISSERTATION ABSTRACTS INTERNATIONAL, 37(2A), 815.

Redford, A. P. (1975) The curriculum content of training centres for mentally handicapped in England and Wales. RESEARCH EXCHANGE AND PRACTICE IN MENTAL RETARDATION, 1, 4, 185-196.

Regional Advisory Council for the East Midlands (1978) FURTHER EDUCATION FOR THE HANDICAPPED STUDENT: A CHECKLIST FOR COLLEGES. Nottingham: EMRAC.

Reiter, S. and Whelan, E. (1975) Vocational counselling of mentally retarded young adults. BRITISH JOURNAL OF GUIDANCE AND COUNSELLING, 3, 1, 93-106.

Richards, I. D. G. and McIntosh, H. T. (1973) Spina Bifida survivors and their parents – a study of problems and services. DEVELOPMENTAL MEDICINE AND CHILD NEUROLOGY, 15, pp. 292-304.

Richardson, S. A. (1971) Children's values and friendship – a study of physical disability. JOURNAL OF HEALTH AND SOCIAL BEHAVIOUR, 12, 253-258.

Richardson, S. A. (1976) Attitudes and behaviour towards the physically handicapped. Birth Defects: ORIGINAL ARTICLE SERIES, XII, 4, 15-34.

Richardson, S. A. (1978) Careers of mentally retarded young persons: Services, jobs and interpersonal relations. AMERICAN JOURNAL OF MENTAL DEFICIENCY, 82, 4.

Richardson, S. A. and Emerson, P. (1970) Race and physical handicap in children's preference for other children. HUMAN RELATIONS, 23, 33-6.

Richardson, S. A., Hastorf, A. M. and Dornbusch, S. M. (1964) Effects of physical disability and child's descriptions of himself. CHILD DEVELOPMENT, 35, 893-907.

Rickard, T. E., Triandis, H. C. and Patterson, C. H. (1963) Indices of employer prejudice toward disabled applicants. JOURNAL OF APPLIED PSYCHOLOGY, 47, 1, 52-5.

Roberts, D. J. (1975) A survey of 235 Salford handicapped school leavers for the years 1970, 1971 and 1972 compared with 239 non-handicapped school leavers for the same years. PUBLIC HEALTH, 89, 5, 1207-11.

Roberts, K. (1969) The changing functions of the Youth Employment Service. SOCIAL AND ECON. ADMIN. Vol. 3.

Roberts, K. (1971) SCHOOL TO WORK. Newton Abbot: David and Charles.

Roberts, L. and Williams, I. (1980) Three years on at Pringle School. SPECIAL EDUCATION: FORWARD TRENDS, 7, 2, 24-6.

Rodda, M. (1970) THE HEARING IMPAIRED SCHOOL LEAVER. London: University of London Press.

Rosen, H. and Komorita, S. S. (1969) A decision paradigm for action research: Problems of employing the physically handicapped. JOURNAL OF APPLIED BEHAVIOURAL SCIENCES, 5, 4, 509-518.

Rosenthal, R. and Jacobson, L. (1968). PYGMALION IN THE CLASSROOM: TEACHER EXPECTATION AND PUPILS' INTELLECTUAL DEVELOPMENT. New York: Holt, Rinehcut and Winston.

Rowan, P. (1980) WHAT SORT OF LIFE? Windsor: NFER Pub. Co.

Rowe, B. and Morgan, B. (1976) Care for the handicapped adult. SOCIAL WORK TODAY, 7, 5, 134-136.

Russell Report (1973) ADULT EDUCATION: A PLAN FOR DEVELOPMENT. London: HMSO.

Rutter, M., Graham, P., Chadwick, O. F. D. and Yule, W. (1976) Adolescent Turmoil: fact or fiction. JOURNAL OF CHILD PSYCHOLOGY AND PSYCHIATRY, 17, 35-6.

Rutter, M., Tizard, J. and Whitmore, K. (1970) EDUCATION, HEALTH AND BEHAVIOUR. London: Longman.

Ryan, J. (1973) Scientific research and individual variation. In Clarke, A. D. B. and Clarke, A. M. (Eds) MENTAL RETARDATION AND BEHAVIOURAL RESEARCH, 23-30, London: Churchill Livingstone.

Sainsbury, S. (1973) MEASURING DISABILITY. Occasional papers on Social Administration, No. 54, London: G. Bell and Sons.

Sameroff, A. J. (1975) Concepts of Humanity in Primary Prevention: Paper presented to the Vermont Conference on the Primary Prevention of Psychopathology. Burlington, Vermont, June.

Sameroff, A. J. and Chandler, M. J. (1975) Reproductive risks and the continuum of caretaking casualty. In Horowitz, F. D., Hetherington, M., Scarrsalapatek, S. and Siegel, G. (Eds) REVIEW OF CHILD DEVELOPMENT RESEARCH. Chicago: University of Chicago Press, 4, 187-244.

Sampson, O. (1971) Children in a world apart. SPECIAL EDUCATION, 60, 2, 6-9.

Sarason, S. B. and Doris, J. (1979) EDUCATIONAL HANDICAP, PUBLIC POLICY AND SOCIAL HISTORY. London: Collier MacMillan.

Schechter, E. S. (1977) Employment and work adjustment of the disabled: 1972 survey of disabled and non-disabled adults. SOCIAL SECURITY BULLETIN, 40, 3-15.

Schools Council (1968) YOUNG SCHOOL LEAVERS. ENQUIRY 1. London: HMSO.

Scott, M., Roberts, E. G. G. and Tew, B. C. (1975) Psychosexual problems in adolescent spina bifida patients. DEVELOPMENTAL MEDICINE AND CHILD NEUROLOGY, 17, 563-573.

Sechrest, L. and Jackson, D. N. (1961) Social intelligence and accuracy of interpersonal predictions. JOURNAL OF PERSONALITY, 29, 167-182.

Shakespeare, R. (1975) THE PSYCHOLOGY OF HANDICAP. London: Methuen.

Shaw, W. (1972) Role of the classroom specialist. Paper presented to the Annual Int. Conv. Council for Except. Children. Washington DC.

Slater, R. (1978) TRAINING FOR OPEN EMPLOYMENT – THE DEBATE OVER INTEGRATION AND SEGREGATION. London: MSC.

Social Policy Research (1973) The implementation of the Chronically Sick and Disabled Persons Act. National Fund for Research into Crippling Diseases.

Spain, B. (1973) Spina Bifida: the need for community support. QUARTERLY BULLETIN OF THE INTELLIGENCE UNIT OF GLC, 23, June.

Speake, B. R. (1977) SOCIAL EDUCATION OF THE MENTALLY HANDICAPPED: AN ANNOTATED BIBLIOGRAPHY. Cardiff: Welsh Office.

Speake, B. and Whelan, E. (1977) YOUNG PERSONS' WORK PREPARATION COURSES: A SYSTEMATIC EVALUATION. London: MSC, TSA.

Standahl, B. W. (1972) The differential effects of four training strategies for use in the sheltered workshop. DISSERTATION ABSTRACTS INTERNATIONAL, 33(4B), 1772-1773.

Stanway, K. (1977) Enclaves for the mentally handicapped. TEACHING AND TRAINING, 15, 52-63.

Strassberg, D. S. and Wiggen, E. (1975) Conformity as a function of age in pre-adolescence. JOURNAL OF SOCIAL PSYCHOLOGY, 91, 1, 61-6.

Sturgeon, J. (1977) Examination problems of the handicapped. GLAD NEWS, 2, 4, 11-15.

Tansley, P. (1981) ASSESSMENT PROCEDURES FOR THE BLIND AND VISUALLY HANDICAPPED IN FURTHER EDUCATION: INTERIM REPORT. Slough: NFER.

Tarjan, G. and Eisenberg, L. (1972) Some thoughts on the classification of mental retardation in the United States of America. AMERICAN JOURNAL OF PSYCHIATRY, 128, 14-18.

Taylor, R. (1974) A normal job. NEW SOCIETY, 29, 613, 19-20.

Thomas, B. and Wetherell, D. (1974) LOOKING FORWARD TO WORK. London: HMSO.

Thomas, E. (1963) THE HANDICAPPED SCHOOL LEAVER. London: British Council for Rehabilitation of the Disabled.

Tinkelman, et al (1976) The impact of chronic asthma on the developing child: observations made in a group setting. ANNALS OF ALLERGY, 37, 174-179.

Tizard, J. (1964) COMMUNITY SERVICES FOR THE MENTALLY HANDICAPPED. London: OUP.

Tizard, J. (1966) Schooling for the handicapped. SPECIAL EDUCATION, 55, 2, 4-7.

Tizard, J. (1974) Longitudinal studies: problems and findings. In Clarke and Clarke, pp. 223-256.

Tizard, J. (1974) Services and the evaluation of services. In Clarke and Clarke, pp. 840-856.

Tizard, J. (1974) (Ed) MENTAL RETARDATION: CONCEPTS OF EDUCATION AND RESEARCH. London: Butterworth.

Tizard, J. and Anderson, E. (1979) THE EDUCATION OF THE HANDICAPPED ADOLESCENT: ALTERNATIVES TO WORK FOR SEVERELY HANDICAPPED PEOPLE. Paris: OECD, CERI/HA/79.11.

Tobin, M. J. (1979) A longitudinal study of blind and partially sighted children in special schools in England and Wales. INSIGHT, 1, 1, 8-14.

Tomlinson, E. and Whelan, E. (1977) Use of videorecording in teaching severely mentally handicapped adults to perform a complex assembly task. Habilitation Technology Project, Hester Adrian Research Centre, University of Manchester.

Tomlinson, R. (1981) EDUCATION FOR INDEPENDENCE. Unit 3, Open University Special Needs in Education Course (E241). Open University Press.

Tuckey, L., Parfit, J. and Tuckey, R. (1973) HANDICAPPED SCHOOL LEAVERS: THEIR FURTHER EDUCATION, TRAINING AND EMPLOYMENT. Slough: NFER.

Tuckey, R. and Tuckey, L. (1974) Handicapped school leavers. SPECIAL EDUCATION, 4, 132-4.

United Nations (1976) Social Barriers to the Integration of Disabled Persons into Community Life. A report of an expert group meeting 25 June-5 July, ST/ESA/62.

Veness, T. (1976) SCHOOL LEAVERS: THEIR ASPIRATIONS AND EXPECTATIONS. London: Methuen.

Volpe, R. (1976) Orthopedic Disability: restriction and role-taking activity. JOURNAL OF SPECIAL EDUCATION, 10, 371-381.

Voysey, M. (1975) A CONSTANT BURDEN: THE RECONSTITUTIONS OF FAMILY LIFE. London: Routledge and Kegan Paul.

Walker, A. (1976) The Hardest Job. COMMUNITY CARE, 1 December.

Walker, A. (1980) The handicapped school leaver and the transition to work. BRITISH JOURNAL OF GUIDANCE AND COUNSELLING, 8, 2, 212-223.

Walker, A. (1981) UNQUALIFIED AND UNDEREMPLOYED: THE FATE OF HANDICAPPED YOUNG PEOPLE IN THE LABOUR MARKET. London: MacMillan.

Walker, A. and Lewis, P. (1977) CAREERS ADVICE AND EMPLOYMENT EXPERIENCES OF A SMALL GROUP OF HANDICAPPED SCHOOL LEAVERS. Careers Quarterly, 29, 1, 5-14.

Walker, A. and Sinfield, A. (1975) Unemployment and disabled people. POVERTY, No 32.

Ward, R. (1979) — Making haste slowly – at Harrow College of Higher Education. EDUCARE, 9, 13-14.

Warnock Report (1978) — Special Educational Needs: Report of the Committee of Enquiry into the Education of Handicapped Children and Young People.

Watson, A. (1972) — A study of family attitudes to children with diabetes. COMMUNITY MEDICINE, 128, 122-125.

Watts, A. G. (1978) — The implications of school leaver unemployment for careers education in schools. JOURNAL CURRICULUM STUDIES, 10, 3.

Watts, A. G. and Herr, E. L. (1976) — Career(s) Education in Britain and the USA: Contrasts and Common Problems. BRITISH JOURNAL OF GUIDANCE AND COUNSELLING, 4, 2.

Wehman, P. H. (1975) — Towards a social skills curriculum for developmentally disabled clients in a vocational setting. REHABILITATION LITERATURE, 36, 11, 342-348.

Weiss, B. S. (1976) — The effects of a vocational training program on educationally handicapped female adolescents in an institutional setting. DISSERTATION ABSTRACTS INTERNATIONAL, 36(11A), 7349.

West, C. K. (1974) — A REVIEW OF THE TEACHER EXPECTANCY EFFECT: THE QUESTION OF PREPONDERANT CAUSATION. ERIC Clearing House on Childhood Education. Urbana: Three.

West Midlands Regional Curriculum Unit (1980) — YOP Survey. FEU and West Midlands Advisory Council for Further Education.

Whelan, E. (1973) — Developing work skills: a systematic approach. In Mittler, P. (Ed), ASSESSMENT FOR LEARNING IN THE MENTALLY HANDICAPPED. Edinburgh: Churchill Livingstone.

Whelan, E. (1977) — Basic work-skills training and vocational counselling of the mentally retarded. In Mittler, P. (Ed), RESEARCH TO PRACTICE IN MENTAL RETARDATION: EDUCATION AND TRAINING, VOL. 2. London: University Park Press.

Whelan, E. and Speake, B. (1977) — ADULT TRAINING CENTRES IN ENGLAND AND WALES. Manchester: National Association of Teachers of the Mentally Handicapped.

Wilcock, R. and Dixon, R. (1978) — Development of Manual Abilities Assessment for the Handicapped and Disabled. Current Research Report, Department of Business Management, Sunderland Polytechnic.

Williams, J. (1979) — New skills for further education teachers. ACTIONS, September, 9-10.

Williams, J. S. (1975) — Aspects of dependence-independence conflict in children with asthma. JOURNAL OF CHILD PSYCHOLOGY AND PSYCHIATRY, 16, 199-218.

Williams, P. and Gruber, E. (1967) — RESPONSE TO SPECIAL SCHOOLING. London: Longman.

Wilson, M. (1981) — The Curriculum in Special Schools. Schools Council document.

Wiseman, S. (1972) — Environmental handicap and the teacher. In Wall, W. D. and Varma, V. P. (Eds), ADVANCES IN EDUCATIONAL PSYCHOLOGY, 1, 53-74, University London Press.

Wood, P. H. N. (1975) — CLASSIFICATION OF IMPAIRMENTS AND HANDICAPS. WHO/ICD9/REV. CONF. 75.15, Geneva: WHO.

Wood, P. H. N. and Badley, E. M. (1978) — An epidemiological appraisal of disablement. In Bennett, A. E. (Ed), RECENT ADVANCES IN COMMUNITY MEDICINE, No. 1. London: Churchill Livingstone.

Woodburn, M. F. (1973) — The Social Implications of Spina Bifida. Scottish Spina Bifida Association (Eastern Branch).

World Health Organisation (1980) — International Classification of Impairments, Disabilities, and Handicaps. A manual of classification relating to the consequences of disease. WHO.

Yinger, J. M. et al (1977) — MIDDLE START: AN EXPERIMENT IN THE EDUCATIONAL ENRICHMENT OF YOUNG ADOLESCENTS. London: Cambridge University Press.

Younghusband, E. et al (1970) — LIVING WITH HANDICAP. London: National Bureau for Cooperation in Child Care.

Publications

Title	*Date Published*
Experience, Reflection, Learning – suggestions for organisers of schemes of Unified Vocational Preparation	April 1978
A Basis for Choice – Report of a Study Group on Post-16 Pre-Employment Courses	June 1979
Supporting YOP – suggestions for colleges involved in the Youth Opportunities Programme	June 1979
Developing Social and Life Skills – strategies for tutors	March 1980
Active Learning: A Guide – to current practice in experiential and participatory learning	May 1980
Active Learning: A Register – of experiential and participatory learning Parts 1 and 2	May 1980
Day Release – A Desk Study	July 1980
Further Opportunities in Focus – a study of bridging courses for women	July 1980
FEU Response to 'Outlook on Training' – Review of the Employment and Training Act 1973	July 1980
Loud and Clear? – summary of a study of curriculum dissemination in further and higher education	August 1980
Beyond Coping – Review and Synthesis of Research and Development in Social Education	August 1980
FEU/WMAC YOP survey in the West Midlands (available from the West Midlands Advisory Council, Norfolk House, Smallbrook Queensway, Birmingham B5 4NB) Price £1.25	August 1980
Annual Report 1979-80	August 1980
FEU Response to White Paper 'Special Needs in Education' (Cmnd 799)	October 1980
FEU Response to 'Examinations 16-18' Consultative Paper	December 1980
FEU Response to 'Continuing Education'	January 1981
Signposts – A map of 16-19 educational provision	January 1981
Vocational Preparation	February 1981
FEU Response to: 'CET: Open Learning Systems in Further Education and Training (December 1980)'	March 1981
Transition and Access – a review of low level courses in ILEA	June 1981
Curriculum Control – review of major styles of curriculum design in FE	July 1981
How do I Learn?	August 1981
Balancing the Equation: Women and Science and Technology	August 1981
Leadership in Learning – the reflexive learning of a staff group on further education	September 1981

Printed in England for Her Majesty's Stationery Office
by McCorquodale Printers Ltd., London
HM (0) 1110 Dd 8284657 8M 1/82 McC 3309